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"HEALTH—THE MASTER KEY"

SUMMARY OF LECTURES

AT THE

REFRESHER COURSE

FOR

HEALTH VISITORS
SCHOOL NURSES AND
TUBERCULOSIS VISITORS

HELD AT

THE UNIVERSITY COLLEGE, HULL
AUGUST 16th to 30th, 1947

Women Public Health Officers' Association

Founded 1896

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OPENING SESSION

ADDRESS OF WELCOME by THE SHERIFF.

The Chairman for this Session was Dr. Helen Standring, assistant M.O.H. for M. and C.W. of the city of Kingston-upon-Hull. There were also present on the Platform, The Sheriff (Mr. Austin Hudson); the Sheriff's Lady; the Chairman of the Health Committee; Dr. Morton Stewart; and Miss Cooper Hodgson. Dr. Standring, in her opening remarks, welcomed the Health Visitors and School Nurses present, and said that, under the new Act, the work of Health Visitors would be widened. They would have to deal with a family as a unit, and she was sure they would tackle the visiting of the sick as they had done the visiting of mothers and babies in the past.

The Sheriff extended a "**Civic Welcome**" to the Students; he tendered apologies from the Lord Mayor, who was unable to be present. He said they were very glad to have us there, in what he could not but say were beautiful surroundings in spite of all Hull had suffered. Hull had many points of historical interest, and connections with people of note who had made milestones in history, such as de la Pole, Andrew Marvel, and Wilberforce. He felt he could say Hull had Medical Services second to none, and, in saying this, he paid tribute to those who were carrying them out. He hoped all present would benefit by the course they were just starting, and that they would carry away very pleasant recollections of the City of Kingston-upon-Hull.

Miss Cooper Hodgson expressed our thanks for the Civic Welcome. The Chairman then introduced the first lecturer, Dr. Watson, County M.O.H., for the East Riding, saying he was young and up-to-date.

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PROGRAMME

"HEALTH—THE MASTER KEY"

Opening Session:

CHAIRMAN: MISS HELEN STANDRING, M.B.E., M.D., D.P.H.,
Senior Assistant Medical Officer of Health, Kingston-upon-Hull.

Inaugural Lecture: "Service for Health."

R. WATSON, M.A., M.B., B.Ch., M.R.C.S., L.R.C.P., D.P.H.,
Liverpool; Medical Superintendent, Raywell Sanatorium;
Tuberculosis Officer, East Riding County Council.

"Care of a Healthy Skin."

E. O. HALLIWELL, M.R.C.P., (London).

"Talk and Demonstration on Discussion Technique."

Demonstration Discussion Groups.

"Can Housewives Afford Leisure Time?"

MISS BARBARA POWLETT, B.A., Cambridge, Training Officer, The
Bureau of Current Affairs.

"Public Health Care of Spastic Children." (illustrated).

J. L. BURN, M.D., D.Hy., D.P.H., Medical Officer of Health and
School Medical Officer, County Borough of Salford.

"The Influence of Home and Social Environment on the Health of School Children." (illustrated).

J. L. BURN, M.D., D.Hy., D.P.H., Medical Officer of Health and
School Medical Officer, County Borough of Salford.

"Prevention of Infection of the Ears, Nose and Throat."

E. M. DEARN, M.B., Ch.B., D.L.O., R.C.P.S., Assistant Surgeon,
Ears, Nose and Throat Department, Hull Royal Infirmary.

"Child Guidance."

H. EDDLSTON, M.B., D.P.M., Psychiatrist and Director, Bradford
Child Guidance Clinic.

"Safeguarding Ante-Natal Deaths and Neo-Natal Deaths."

"The Premature Infant—General Management."

“The Premature Infant—Methods of Feeding.”

MISS V. MARY CROSSE, M.D., (Lond.), D.P.H., D. Obst., R.C.O.G.
Deputy Senior Assistant Medical Officer of Health (for Maternity
and Child Welfare), Medical Officer in charge of New Born
Nurseries and Premature Baby Unit, City of Birmingham
Maternity Homes, Lecturer in Child Health, University of
Birmingham.

“Personality through Speech.”

MISS FREDA PARSONS, Speech Consultant, Birmingham Children's Hos-
pital.

“Breast Feeding and Weaning.”

“Artificial Feeding.”

T. MORTON STEWART, M.D., D.C.H., Honorary Physician, Victoria
Hospital for Sick Children, Hull.

**“The Nutritional Significance of Meals for the Expectant and
Nursing Mother.”**

MRS. L. HUNTER, M.Sc.

“The Unmarried Mother.”

MISS L. E. BASHFORD, Moral Welfare Worker, Superintendent of the
Hull Sheltering Home for Girls.

“Reforming Problem Mothers.”

MISS RUTH WHITE, S.R.N., S.C.M., R.S.C.N., Superintendent
Health Visitor, County Borough of Middlesbrough.

“The Father's Place in the Home.”

LESLIE HOUSDEN, O.B.E., M.D., Chairman, Parentcraft Teaching
Committee, National Association of Maternity and Child Wel-
fare.

“The Art of Telling.” (Two Sessions).

MRS. B. E. SHAW, 1st Class Diplomee, Household Science, formerly
member of Staff, National Society's Training College, Educa-
tional Organiser, Women Public Health Officers' Association.

Concluding Lecture.

“Health—The Master Key.”

NICOLAS GEBBIE, M.D., D.P.M., D.P.H., Medical Officer of
Health, Kingston-upon-Hull.

Inaugural Lecture

SERVICE FOR HEALTH

DR. R. WATSON, County Medical Officer of Health and School Medical Officer for E. R. County Council.

A thirst for knowledge must have brought people to this city which can hardly be called a holiday resort and that thirst looks like being slaked by the time the course is through. Health Visitors have dedicated themselves to the service of the community, and you wish as a result of this course to do this more efficiently: I have therefore taken as the title of this inaugural lecture Service for Health.

By this time next year we shall probably have seen the application of the implementation of the new legislation. The new arrangements will affect everyone and as Health Officers you will eventually have an interest in every section of the Act, and all the service you can give will be demanded if these schemes are to be worked efficiently, and, most certainly, whilst there are insufficient nurses to carry them out. However things develop there will be a tendency to close the gap between preventative and clinical work. Taking some of the various sections and the duties laid upon Health Authorities let us see what they entail:—Sec: 22 Care (especially dental) of expectant mothers and children under 5 years: i.e. the ordinary M. and C.W. duties; it is to be regretted that Maternity Homes (which are for the normal case) will now be the responsibility of the Regional Hospital Board, but the Act has to be worked as it stands. Every person is to have access to his or her own doctor for free treatment, so the G.P. will come more and more into the picture, and clinics will become more and more of a specialist character. The Health Visitor must therefore visualise a gradual change in her relationships with the medical profession, a change which will bring her more and more closely into the confidence of the General Practitioner.

Sec.: 23—"Midwifery"—few alterations, but there is the implied suggestion that this is a separate service cut off as regards personnel from the rest, whereas actually they have to be more closely interwoven.

Sec.: 25—a new duty for Local Authorities—"Nursing in the home." The work carried out for years by District Nursing Associations, and subject to the vagaries of voluntary contributions. is now to be fully recognised and become a state responsibility. Many additional nurses will be required to provide for areas not yet covered or insufficiently covered.

Sec.: 26—a complete scheme for vaccination and immunisation: Whether these operations are performed in clinics, schools, special sessions, or by General Practitioners the person to set the ball rolling will in most cases be the Health Visitor or Midwife, the people who visit in the homes.

Sec.: 28—may prove to be the most important of all. It has the wide application of making arrangements for the purpose of preventing illness, the care of persons suffering from illness or mental defectiveness, and for their after care; the latter is insisted on for T.B. but the Minister hints he might consider the application of the scheme to other illnesses. In this the tuberculosis nurse will find herself closely linked with the new after care Committee and may even find herself a joint-officer employed by the Local Health Authority and the Regional Hospital Board.

Sec.: 29—"Domestic Helps" for householders in various circumstances. So extensive a category that the necessity may soon arise to distribute available domestic helps under a "points" system in the same way as houses are sometimes allocated, and the Health Visitors special knowledge may be required to settle the competing claims of applicants for this scarce commodity.

Sec.: 24—the "King-pin" of the whole new service administered by the Local Health Authority—says it shall be a duty to provide Health Visitors to give advice as to the care of young children, expectant and nursing mothers, and to persons suffering from illness—i.e. mental illness and any injury or disability requiring medical or dental treatment or nursing—also they will have the responsibility to advise as to measures necessary to prevent the spread of infection. At last the Health Visitor is to be given the responsibility to consider and advise on the health of the household *as a whole* both regarding preservation of health and precautions against spread of infection. To be this "health educator" she must know all the factors influencing a particular family's life; she must be in the confidence of the family doctor, must know the needs of the family for nursing, must link up with the district nurse, must know about housing conditions and infectious disease contacts, must link up with the local Health Department, must know all the provisions for expectant and nursing mothers in hospitals and clinics, linking up with Regional Hospital Boards, Local Authorities and district midwives. She must know all about infant care and upbringing, premature infants, nursery, primary and secondary schools and colleges for further education, linking up all responsible authorities. She must know about T.B. after-care and schools. She must know about mental defectiveness, mental illnesses and the method of dealing with them, about dental treatment for expectant and nursing mothers, young children, and school children and other facilities; about industrial conditions, linking up with the factory doctor and welfare officer, about the care of the aged, and supply of domestic help and ambulances. She must know where to find the answer to questions on any problem from conception control to cremation, from prematurity to prostatectomy, from teething to typhoid, from work to want; in fact Health Visitors will have to be paragons "de luxe!" and in spite of the present shortage, all the workers required are expected to be produced, by a magic wand, by the "appointed day." The Lecturer then visualised an amusing picture of what he called an average household in any town: a "Mrs. Brown" and her family, and all the possible visitors she *might* have in one day, with the consequent interruptions to her daily duties: an exaggerated picture but still possible. Then he drew another picture showing wastage of time and energy caused by various trained officials visiting in country dis-

tricts, and how we must envisage the development of the "all purpose" officer. He concluded by saying that this service "for Health" has "come of age" and is generally recognised as being as important as the service for illness, and must be all-embracing and not limited to individual groups of the population; there must be a marriage between the steady plodding preventative service and the dramatic curative one. There is now a change of viewpoint consequent upon improved education and general knowledge and the time is rapidly approaching when (illness will be regarded by all as a failure of the health service and not as an inevitable concomitant of normal everyday life. To the health workers who are trained and available will fall, during the next few years, a heavy burden as their numbers are all too few.

PREVENTION OF TUBERCULOSIS

DR. T. S. TOWNSEND.

Before discussing prevention one must consider the cause of Tuberculosis and under what conditions it flourishes.

Distribution. It is a disease to which all warm-blooded animals appear susceptible, viz.: human beings, cattle, domestic fowls, monkeys in confinement, pigs in certain parts of Europe. In sheep, goats and horses it is rare; cats and dogs are not prone to the disease. In man tuberculosis is his most universal scourge, formerly responsible for $\frac{1}{8}$ of all deaths, but through the years this rate has been greatly reduced and is now superseded by Heart Disease, malignant disease, and, in some years, by Pneumonia. The death rate from all forms of T.B. in various years was:

the 10 years 1851-1860	3,481 per million of population
1913	1,352 per million of population

It rose during war,
then fell in 1921 to 1,002 per million of population for males.

777 per million of population for females

This death rate entails serious damage from the economic point of view, since the early death of these persons prevents the community from reaping the material advantage of their work at the age periods of maximum efficiency and productivity. As the sufferers are in many cases the heads of households and the bread-winners their years of invalidity and their early death also lead to hardships and poverty in the family, rendering them less resistant, with the result that the children and other members of the household are liable also to become affected.

Cause of the Disease. (a) The *seed*, the bacillus tuberculosis, a minute rod-shaped organism has 3 main varieties "avian" (birds) not affecting man, "bovine" (cattle) which causes 10% of deaths in children and also much crippling, and "human", which affects man. The Bacilli are found in the body in lesions: in lymphatic glands and joints they are scanty; in sputum they are in millions, and occasionally they are in the blood. Outside the body they are widely scattered where human beings are gathered together. The chief sources are expectoration of sufferers and the milk of T.B. cows; it can be carried about on boots

and shoes and in olden days on long skirts. Experiments have shewn the presence of T.B. in the dust of hospital wards, public buildings, streets, railway carriages etc. It is so widely spread that it is almost impossible for anyone to avoid getting a weekly dose in throat or air passages, but most adults have either a natural or an acquired immunity. Bovine bacilli are distributed in milk, rarely by the flesh of animals, still more rarely by contact; this form is rare in adults.

(b) **The Soil.** Sir William Osler likened infection in tuberculosis to the parable of the Sower: (1) some seeds are scattered broadcast and "fall by the wayside," the majority of these are killed by the sun.

(2) "Some fell in stony places" these lodge in most of us but make no headway.

(3) "Some fell among thorns" cases of T.B. where seed grows for a time, but the protecting forces of the body get the better of the struggle.

(4) "Others fell on good ground:" in this group were the 53,000 deaths from T.B. in 1916; the soil was suitable and the protecting forces feeble.

The Adult human being in health is almost immune. Town dwellers usually develop an immunity. Some people have a predisposition to tuberculosis. An acquired disposition may arise through lowering of the resistance of the body, unhealthy living and working conditions, and dusty occupations foster the disease, and persons addicted to drink are particularly susceptible. The influence of environment was demonstrated by Trudeau by experiments on rabbits; inoculated with T.B. and kept in confinement they soon succumbed, if allowed to run wild they recovered. Men are more susceptible than women, but the difference is slight: the worst ages are 1—5 years and 18—30 years, but no age is exempt. Debilitating diseases are another cause—chronic catarrh, measles, whooping cough, diabetes.

Modes of Infection. (a) Heredity—very doubtful. (b) Inoculation—very rare. (c) Infection in childhood, (1) especially in houses where there is a case of T.B., (2) following on measles and whooping cough, (3) from milk in the diet. (d) Inhalation—from bacilli in dust from dried sputum, bacilli in driplets of sputum by coughing.

The consumptive is only harmful through his bad habits, coughing and spitting. In a sanatorium he gets training, close contact as between husband and wife, and mothers and children is dangerous. There is also infection by ingestion through tonsils and industries to various glands.

Preventive measures to reduce Tuberculosis.—(1) Compulsory notification of T.B. is required under Regulations passed in 1912. The notified case should be visited by the M.O.H. or one of his officers and a report given of home conditions; the patient advised on all necessary methods of precaution and disinfectants supplied free. All contacts should be sent for examination. (2) *Food and environment*—nutrition in a land of plenty—good housing and good wages; a high incidence is due to faults in these conditions. The part played by overcrowding and foul air is well shown at Salford where there were many back to back houses:

THE CARE OF A HEALTHY SKIN.

DR. E. O. HALLIWELL.

In order that we may understand how to take care of the skin it is very necessary that we should have some knowledge of the nature of the skin and its functions.

We should regard our integument as a limiting membrane between the living organisms and its environments. Developmentally, therefore, it is as old as life itself. The most simple organisms, that is the unicellular ones, have an ectoderm, or skin which is a part of the single cell. With evolution and the development of multicellular creatures, special cells are set aside for the purpose of becoming the skin. The skin provides mechanical protection. It is the total sensory organ, hence through the skin and its appendages, the smell organ, eye and ear, the creature has knowledge of its environment. The temperature regulating mechanism of the body is carried out in the body by means of sweat glands. It acts as the sole organ of excretion in those creatures who have not yet developed kidneys. As the species become more complex so the skin becomes modified to suit their particular requirements, retaining to a greater or lesser degree its primitive functions.

In the fully developed skin of man we have an outer covering, called epidermis, which is insensitive, the sensation being appreciated by the true skin below. It incorporates in its substance blood vessels. For its nutrition sebaceous glands for the maintenance of the exact greasiness which is necessary in the environment in which it may live. It has hair nails and horn, according to its needs. Some parts of the skin show especial developments of particular features. Hair will grow on those places which require protection, such as the scalp, and on those places where friction is likely to occur most. Nails on places where they will be most useful. Sebaceous glands are aggregated in certain well known parts of the body, in hairy places, but are absent from the hands and feet.

We must now know the main trends of deviation from health. They are excessively dry skin, called Xeroderma, usually due to the congenital absence of the glandular system, sebaceous and possibly sweat glands. There are those who have an excessive amount of moisture of the skin: Hyperdrotics. Those who secrete too much oiliness, or what is perhaps a better term, waxy material, are called Seborrhoeics. We have local exaggeration of particular elements of the skin, known as Naevi, commonest are those of blood vessels and few of us have not seen those red disfiguring patches on the skin.

It must not be forgotten that the skin is subject to many accidents and diseases, as are other organs of the body. Diseases are acute, chronic or degenerative, and then there are new growths.

Given, we hope, a healthy skin what are we to do to retain it, or minimise inherited weaknesses or defects, e.g. excessive oiliness, or excessive dryness. It cannot be too strongly emphasised that treatment of all skin diseases should be instituted in the early stages. There is no disease

which attacks an organ without leaving some permanent effect. There is no doubt that slight scarring occurs in all inflammatory diseases and once a dermatological illness has taken place the skin is never as robust an organ as formerly. Bacterial invaders, such as those which cause boils and impetigo, should be appropriately treated at once. It is well known that once a boil is badly managed it results in a group of boils, and the tendency to recurrence of this condition may persist for years, or throughout the life. There is no excuse to-day for persons harbouring parasites, yet one sees far too many children with *Pediculo Capitis*. Any excessive scurf in the scalp should be treated with appropriate antiseptics and not allowed to develop. This is particularly true in the greasy type of skin that is prone to skin affections. Scurf is a ringworm that is only encouraged by the application of vaseline, which merely disguises its presence. Great care must be exercised in combating any tendency towards eczema; it is to be likened to a nervous breakdown and psychological investigation and treatment is necessary, though it may be of a simple kind, quite well carried out by the Nurse. A bad attack of eczema should be avoided at all costs. Those who have a greasy type of skin should bath more frequently than others. Those whose skin is too dry should use a little oily cream in minimal quantity, regularly. Those people who sweat profusely should consult their doctor, as their functional nervous system is probably out of order.

A word about clothing. The human being is an animal whose habitat is the air. Clothing therefore should not be occlusive; it should allow the air to circulate freely around the body. Many excretory and respiratory functions are going on between the skin and the air, and this should be encouraged, not retarded. Silk is probably the best material to wear next to the skin, it being light, warm and porous. Cotton will absorb water, but it will not absorb sebum. Wool absorbs sebum and a certain amount of water, but, it being an animal hair it harbours fungus and organisms, and is, therefore, particularly unsuitable for the seborrhoeic type.

A bath, not taken for the purpose of removing incidental dirt from the surface of the body and for the washing away of sweat and sebum, a quick daily bath is most desirable. A reasonable soaping of the body with a good quality soap is necessary, but hard scrubbing of the skin, which will remove protective layers, is harmful. The body is not meant to be immersed in water for long periods, as the epidermis becomes soddened.

Powders and creams are frequently used by women and these are in no way harmful; indeed, a powder is a most useful aid in absorbing excessive oily secretion. Creams which are composed of Glycerine, Oil and water are a very reasonable thing to use on those skins which are by nature too dry and liable to scaling and chapping.

In conclusion, I hope these remarks have helped to clarify a subject that is often regarded as mysterious and very specialised, but which is, after all, really founded upon simple physiology and governed by common sense.

DISCUSSION TECHNIQUE

MISS B. POWLETT.

THE SETTING FOR A DISCUSSION GROUP

First create a friendly atmosphere: nothing worth while will happen if people do not enjoy themselves; moreover next time they will not turn up! So choose a subject in which all are probably interested, and with which they are well acquainted; choose the right person for leader; if possible pick your room: or, if you cannot get what you want, improve what you are obliged to use.

The ideal room for discussion is light, cheerful, and not so small as to cause crowding, nor so big that empty spaces cause self-consciousness. You can give an air of informality by twisting seats out of rigid rows: with a small circular arrangement everyone can see those changes of facial expression which make discussion more vivid, and the shy cannot creep into back rows and become yet more silent and isolated. Do not have any tables in the circle, and particularly not for the leader; rows are the setting for public meetings, and tables are for committees. If possible allow smoking, sewing or knitting, which are all aids to a friendly atmosphere.

WHAT IS A GOOD SIZE FOR A GROUP?

Eight to fifteen people is about the ideal number—fewer is too personal and prevents easy expression from the shy: more tends to become competitive, and some are left out, as there is not time for all to take part, which is most undesirable.

THE GROUP LEADER

A friendly easy personality is the essential qualification, rather than academic or specialized knowledge. A group leader is not there primarily as a teacher to inform people; she should be more like a good hostess, with the knack of making everyone feel so much at ease that the group will together produce ideas and suggestions which will make a first-rate discussion. At the same time there can be a co-operative attempt at learning something new, but everyone must have an equal chance to take part. It is important the group should feel that the yardstick for participation is sincerity and a willingness to submit opinions to a reasoned examination by all, rather than the possession of specialist knowledge. So the leader should have the gift of asking the right questions to stimulate clear thought, but should not provide the answers: conclusions should be a group achievement. The leader must not be a dominating personality nor become the central figure, like a lecturer, rather she should act like a sort of spider, and serve the group by gathering the separate threads of thought into a neat web. She must also watch for the very talkative rather bouncy persons who like to occupy a good deal more than their share of the limelight: she must invent ways of getting these people to give others a turn, without at the same time destroying their keenness. A useful way to interrupt their flow and encourage the silent is "That was a very interesting point Mrs. So-and-So; I wonder what the rest of the group feel about it?"

Silent people need handling with understanding. A direct personal question will probably make them dry up permanently, but they can often be encouraged to speak by bringing the discussion round to aspects of the subject with which they are familiar. Quite likely then a silent one will speak before she realises it, and once having taken the plunge it will never again be so difficult for her to join in.

CHOOSING A SUBJECT

Ideally it is best to ask the group what they would like to discuss, but this is not always practical. However, the leader can generally find out the interests of her group, and, with these in mind, pick a subject which will appeal to everyone; the sort of everyday things that the average Mrs. Smith spends threequarters of her time doing, talking about, or just imagining, would be suitable. Thus to most women food, queues, clothes, coupons, children, home-life, films and "perms" are much more intimately interesting than public health, economic planning, taxation, the atom bomb, or the prospects of the United Nations. These latter things are vitally important, but the average housewife does not think about them until they impinge on her everyday life. In the same way she cannot be brought to discuss public health with that zest which makes for a worth while discussion until the leader links the subject to her everyday wants and fears, by an apt title, a vivid introduction, or an effective discussion aid.

MAKING THE SUBJECT COME ALIVE

Suppose Diphtheria Immunisation is to be the subject for discussion. First decide where this subject impinges most vividly upon the everyday life of the group, and choose a title reflecting this aspect such as, "Is my child in danger from diphtheria?"

Secondly, you require a vivid but short introduction. This can take the form of a visual or other aid, as described below; or it can be merely a few evocative or descriptive sentences that put people into the frame of mind in which they want to discuss. The essential point is that it is not enough just to leave the subject to speak for itself: we live in an age of showmanship, and your group has to compete with the standard of attraction set by the press, the films and the radio. For instance a subject such as "Do we want a public nursery in our town?" may seem to need no introduction because of its obvious appeal. But if you expect to start discussion going by simply asking this question you will find most people temporarily tongue-tied. This is because they are overwhelmed by having the whole of the subject put before them suddenly: for in this mechanical century people no longer fall naturally into discussion. What really happens is that while you may have the bodies of your group sitting round you in a friendly circle, their minds are often miles away—thinking probably of all their household cares—until the leader makes the subject of the discussion more real than any of these pre-occupations.

There are various kinds of interest-arousing devices, or introductory aids; (1) something for the group to look at: we learn by what we see rather than by what we hear. In a discussion on Clean Milk you might attract attention by a picture of a cow, and then enlargements of noisome

germs and their rate of multiplication in dirty milk; by now the group should have become interested enough to discuss why the germs occurred, and how to safeguard children from them.

(2) Dramatic script—beforehand write out the parts of an imaginary conversation between two mothers on some health problem. The extremes of both points of view can be touched upon if possible humorously, and brought to life by getting two members to read the script. People should then carry on naturally.

(3) Another useful aid, which stretches the minds of those in the group towards international affairs, can be based on the flags of the countries of Europe. Make paper and pea-stick models beforehand; hand one to each member. Those holding the British, American and Russian flags are asked to go to separate corners of the room; the remainder are asked to sort themselves into the corner which they think has most influence with the country each represents.

The leader then asks if every one is satisfied; whereupon a reasoned discussion will break out, between the Great Powers and the country concerned over the placing of, say, Greece. It will also become evident that a corner will be needed for those who “Dont’ know”, in which States such as Switzerland, Spain and Germany will probably take refuge. Next stimulate further discussion by asking if any future events could alter the placing of “Don’t Knows”—“for instance to which corner would Spain go if Franco was replaced?” Then ask what points of disagreement separate the British and American groups: and a discussion will probably arise on dollars, the Marshall Plan, isolation, and industrial policy. Then ask if these two groups could fuse, supposing these differences were satisfactorily settled: and then pass on to the same process in relation to Russia. By the end of the discussion a surprising amount of general information will have been pooled; and there has been a really constructive discussion on what “prevents world co-operation?”

The point of this form of aid is that it not only induces thought, but creates impact and co-operation by getting the group moving about and doing things. It is a commonplace that there is a close connection between what happens to our bodies and our minds: this particularly applies in discussion, where the shy person who sits rigidly tensed with embarrassment at her own lack of knowledge, will be greatly helped by moving about in the anonymity of a group of others doing the same.

This method can be varied to suit the occasion: for instance, it could serve as a means of discussing district, area, or even street difficulties, simply by giving the group members the relevant place labels instead of flags.

HOW TO MAKE FACTS AVAILABLE WITHOUT GIVING A LECTURE

Another point to bear in mind is that whenever possible the leader should avoid the authoritarian appearance of providing the information necessary for a good discussion; to do this tends to make her far too much of a teacher, and the attitude of being apart from and superior to the group. She should use her ingenuity to find means of projecting that information impersonally, either by easy and attractive pictures and

charts which all can study together, or by letting the group build up the necessary basis of fact.

A discussion on Food and Rationing might be started by asking the group which pre-war food each misses most. The leader hands out cards bearing symbols for each food mentioned—a pig for bacon, sheep for meat and so on. These symbols utilise the figures last quoted by the Minister of Food as the weekly average received per person, and to show these quantities each symbol stands for 4 ozs. (or points in the case of milk). Thus while there is only a portion of a pot of jam there are quite a number of bags of flour. To contrast with the present day amounts, a second set of symbols is handed to the group with the average amounts per person in 1939. When each has pinned her own two sets of symbols on the board there is thus demonstrated a clear and factual contrast in food quantities then and now. Many of these facts are new and surprising to the group, who, on seeing there is more milk available now than before the war, will want to know where it goes. This natural reaction can be utilised by the leader to start a discussion on priorities; is there a waste of milk at schools? and other related subjects. The enjoyable activity of the group, co-operatively building up for themselves the necessary body of facts, has replaced the old-fashioned leaders' "introductory lecturette", with its passive reception and over-emphasis on the teacher role. This form of aid can be adapted to any discussion requiring a basis of statistical facts: with a little imagination the necessary figures can be entertainingly "personalised" in the same way as bacon quantities were illustrated by pigs.

CHANGING TALK INTO DISCUSSION

Having aroused interest and co-operation, even though in the form of mere statements of opinion, the leader next steps in to induce the group to try to sort fact from opinion, and then to discover the implications behind the facts. This is most effectively done by questions of the "How? Why? for what purpose?" variety, which get the group into the habit of testing the validity of its own ideas. The leader should if possible avoid answering questions herself, she should pass them back to the group with an air of "I wonder which of us can solve that one?" It is very rare that no one has any idea, but the leader must have enough faith in her group to let them take their time. It will usually be found that the group discover that among themselves they possess a surprising total of information: while the very things they do not know can be collected as a series of questions to be answered by next meeting. This can be done either by a co-operative group effort, each member tackling one query with the help of librarian, books or films, and bringing the answer next time; or the group may request an information session, in the form of a lecture or film which will fill the gaps revealed by discussion.

The important point is that this informal method has aroused interest in the whole subject, and a created positive appetite for information, instead of thrusting facts upon a passive audience. By starting from the group's own interests, and proceeding to a co-operative assessment of fact as distinct from opinion, the group will advance to the stage where it is ready to discuss the implications of the points raised. This may

result in a request for further information, or a discussion of action to be taken, separately or collectively; either way a more real and lasting grasp of the subject will be attained than could have been achieved by any lecture.

WHAT ABOUT CONCLUSIONS?

Since a Discussion Group is not a Cabinet Meeting after which effective action must immediately follow, hard and fast conclusions are not the aim. The object of discussion is for the group to clear its mind upon a problem, and, by separating fact from opinion to advance if possible towards a solution; even if this at first consists in realising clearly what one does *not* know. In fact, discussion will probably show what further questions to ask rather than produce final answers.

This does not mean that the meeting should end in vagueness: it is highly desirable that a brief summary should be made of points raised, and what the group thought about them, not omitting minority opinions. This enables the group to leave with a sense of achievement, and gives it a starting point for further co-operative effort, either by discussion or by seeking direct information.

Inexperienced leaders may find it very difficult to take down the summary, which is an in-taking activity, at the same time as carrying on the out-giving job of group leading. To get over this difficulty it is often worth while appointing beforehand a secretary, who will note very briefly the main points raised, and the groups reactions to them. This of course, should not prevent the secretary from taking a normally active part in the discussion herself.

PUBLIC HEALTH CARE OF SPASTIC CHILDREN

DR. J. L. BURN.

The child suffering from cerebral palsy (otherwise known as Little's disease, Spastic Paralysis, Spastic Diplegia, Paraplegia) is the most neglected of all handicapped children, yet *much* can *now* be done for these children. There are some thousands of educable "Spastics". Only 30% of these children are mentally defective: they are not, as a class, to be stamped as "hopeless idiots to be put away and forgotten"—a phrase often used,—many can be made into useful citizens. So let us redress the wrong by providing full services—preventive, curative, psychological, educational and vocational.

In America, Winthrop M. Phelps has made careful surveys and suggests that of 7 children suffering from cerebral palsy born each year in every hundred thousand population, one dies in infancy, $\frac{1}{3}$ of the other 6 will be feeble-minded but the remaining $\frac{2}{3}$ will be capable of being educated and trained to various degrees of efficiency, giving about seven hundred "educable" cerebral palsy cases under the age of 16 in every million population. Phelps offers living proof that these children are worth salvaging.

In Glasgow, investigations showed that in 1946 there was an average incidence of 1.2 cerebral palsied children per 1000 school children. In 36,000 Salford (0—15 years) a similar incidence (1.1) has been estimated.

In this country 5000 spastic children are said to be ineducable and are not attending any school. I often tell students there are three rules in public health care of handicapped children. The first is prevention; the second prevention; and the third prevention! We must treat the cause: unfortunately in many cases this is congenital, but there are cases which have had preventible causes. The after-effects of a birth injury, obstetrical violence, too rapid or too delayed labour, and the great and difficult problem of prematurity, may cause a haematoma of the scalp which presses on the brain and prevents it developing. Tests should be made in pregnancy for the rhesus factor, the results of which are lessening prematurity. A small proportion of cases are the result of such diseases as whooping cough and convulsions, causing haemorrhage in the brain; also falls from a pram, chair, or the nurse's arms may rupture small veins in the soft scalp causing a subdural haematoma; these can be diagnosed by exploration and removed by tapping, and so relieving pressure on the brain; but early diagnosis is essential as haematoma operations cannot be done after 9 months of age. Birth injuries may be a cause of infants not feeding properly and of their failure to thrive without apparent reason. The younger the infant is when diagnosed, the earlier appropriate treatment, the less to unlearn and the faster progress. In the Phelps Children's Rehabilitation Institute near Baltimore, U.S.A. wonderful work has been done in the treatment of these children. Children aged 2 to 21 years are taken in for three months stay for diagnosis; intelligence and personality tests being made: Americans are very clever in this line. In this trial period it is ascertained whether or not they would benefit by a longer stay. There may be 81 staff to 80 children as team work is essential: the children must be continually watched and sympathetically helped. They must not be left only to the orthopaedist, the neurologist helps greatly, and everyone who comes in contact with them should be concerned in their interest. So many of these children have multiple handicaps, paralysis, speech defects, etc. Included in a team are the child welfare and school health officer, neurologist, orthopaedic specialist, physiotherapist, psychologist, speech therapist, occupational therapist, child guidance expert, educational psychologist, health visitor, school nurse, almoner, teacher, office clerks, and last, but certainly not least, the parent.

Special apparatus has been devised to assist physically: children who have never sat up can be supported in a standing position in individual boxes: a high-backed chair gives a great feeling of security; children who have never walked can learn to move about and walk on skis and between parallel bars. Special spoons enable them to learn to feed themselves. Active exercises and the teaching of relaxation, in specially trained hands, are useful for babies and toddlers. Parents are taught to co-operate with simple home exercises, and are impressed that "something can be done." These children can be trained in many ways if interest and care are taken but first they have to be taught to play and do normal things—lace shoes through large holes, and button with large buttons and large button holes. A doctor handicapped himself from birth, largely overcame his infirmities: in a book he wrote, "Born that Way," he says "the turning point in my life was the day I found I could do something."

The compilation of a comprehensive register is important: this must give names and particulars of children suffering from cerebral palsy, recording the degree of spasticity and mental abilities, and a full review of progress from time to time. The question must be asked periodically, "Is there anything more we can do for these children?"

EDUCATION

Nothing must stand in the way of an educable spastic receiving all the educational instruction it can, so that the child may be fitted for work and for life. In America many spastics have reached good positions as doctors, lawyers, etc., and are doing useful jobs. In England a pioneer centre was set up by the L.C.C. at Queen Mary's Hospital for Children, Carshalton, about 3 years ago. It is linked with the School Health Authority and has a team of consultants in addition to a staff which includes physiotherapists, an occupational therapist and special school teachers. After a full examination of each child to discover its abilities physiotherapy exercises are prescribed. Training is also given in speech and feeding. An endeavour is made to treat the whole personality of the child. A recent visit showed excellent work done in this unit, with its specially made equipment. The improvement in the co-ordination of movements of the children at meal times over a period of months, was remarkable. Mrs. Collis, the therapist, has done pioneer work in this field, and has set out her methods of treatment of cerebral palsied children in "A Way of Life for the Handicapped Child."

St. Margaret's School for Spastics, recently opened at Croydon, is also doing fine work on somewhat similar lines. At present incontinent and mentally deficient cases are not accepted here.

In Salford a small day school for spastics has been established at the Municipal Hospital. Accommodation for 8 children has been found to form part of the hospital school. The pupils are brought from their homes daily by ambulance. None of these children is able to derive benefit from education in an ordinary school, therefore the result is pure gain. Orthopaedic Treatment does little good for these children, and massage must never be given as all are hyperexcitable.

PSYCHOLOGY

Parents and others dealing with these children are trained to remember that they are not sick or in need of coddling. Sympathy must take the form of encouragement to self-help. Each child is an unique individual fighting his own battle to overcome his disability, and feels all the urgent needs common to all growing children. Not the least of these is the need of love, for possession of a defect has often already given a sense of inferiority. A link with the child Guidance Service is needed to help in some emotional difficulties.

VOCATION

A good job is the best therapy, and these children can be trained for many, including typewriting and, in some cases, for professions.

To sum up the care of these children is based on the same principle that can be applied in the case of children suffering from other handicaps—early ascertainment, the younger the child the better; close co-operation

with, and training of, the parents in better home care; adequate educational facilities, and emphasis on the needs of the whole child as well as on the best physical care. For all handicapped children these principles form a solid basis of hope for a finer and fuller life.

BIBLIOGRAPHY

“Born that Way”—Earl R. Carlson, New York 1941. “A Way of Life for the Handicapped Child.—Eirene Collis, London 1947. Publications of the British Council for the Welfare of Spastics.

THE INFLUENCE OF HOME AND SOCIAL ENVIRONMENT ON THE HEALTH OF SCHOOL CHILDREN.

DR. J. L. BURN.

Eighty years ago Miss Florence Nightingale, though herself a pioneer in Nursing, when invited to open the buildings for a new children's hospital in Manchester, in her brief and blunt way wrote declining the invitation, she felt that “building more children's hospitals was not the proper remedy for infantile mortality and sickness—*the true remedy lay in improving children's homes.*” We may well marvel at her imaginative insight; that she, whose first claim to fame was her work in hospitals, and in the treatment of disease, could have such pioneer vision. This view, in 1866, contrasts oddly with the forms and practice of the School Health Service of to-day. What a little we learn about the health of children from present day school records! Often they never have a word dealing with home, economic or social conditions. (Happily changes are proposed in future). The amount of home visiting of school-children in many areas is deplorably low, and sometimes when a child confronts us at medical inspection knowledge of the home is nil. Consequently it is hard to view him as a whole child but merely as a child in school hours—a child “chopped up.” There is no justification for this attitude. We need a complete and “moving picture” of the child—at kind of documentary film as it were, not a mere “still” of the child at a medical inspection.

The number of hours in a child's year of life is 8,760—of these only little more than 1,000 are spent in school. Even if we take the child's conscious life only, and allow, optimistically, 11 hours sleep per night—a total of 4,015 hours, the number of hours throughout the year which a child spends subject to home and social conditions is over four times as great as the number of hours subject to school conditions.

The importance of the home and social conditions can also be surmised from the differential incidence of mortality and morbidity in various social classes.

The statistics of the Registrar General for the years 1930/32, though not including the child of school age, do yet provide a pointer by the death rates under one year and in the second year of life, of special importance as an index of social and environmental health.

For infants under one year, the death rate per 1,000 live births for Class 1 (the professional class) is 33, whereas in class 5 (unskilled labourer class) it is 77. We know also that for the child of one to two years the death rate per 100,000 for class 1 is 454, compared with 2,298 for class 5. For deaths following measles the mortality for class 1 is negligible, class 2 has a rate of 70 per 100,000: and class 5 a rate of nearly 469.

One must recognise the great complexity of the problems involved, for there is little exact knowledge of the factors and their precise weight. Precision is often more difficult nowadays in assessing economic and social conditions, for the old clear-cut differences between classes have become less. In districts that used to be the poorest, during war-time some families earned £15 and over per week, whilst food and rent were on pre-war level; on the other hand some middle class families fared badly, and also housing shortages sometimes compelled them to live in "poor areas".

SOCIAL CONDITIONS

A distinctive and regrettable feature of industrial areas is the tendency to have a conglomeration of poor type of house—with no mixture of classes that would lead to a balanced community. Schools in these areas are attended by children whose parents are, traditionally, in the low income group. Similarly there are school areas, fairly sharply differentiated, attended by children of parents largely in the high income group. Surveys primarily undertaken to ascertain the incidence of various disorders have been made in Salford area: the opportunity was taken of making a note simultaneously of the classification (good, fair or average) of the home and social conditions under which the child lived.

DEFECTIVE HEARING

In Salford it was found that the incidence of defective hearing was about twice as great in the "poor" schools as in the "good" schools. Other investigations, conducted under different methods, gave similar results.

OTORRHOEA

In Salford in 1946 investigations according to schools, showed for boys 6.4% in "good" schools and 13.7% in "poor" ones. For girls the incidence was 7.5% and 8.4% respectively.

TONSILLECTOMY

On the other hand amongst the same children as above, the incidence of tonsillectomy among boys from "good" schools was 33% compared with 23% in "poor" schools: and girls showed an incidence of 29% and 21% respectively. Other investigations gave similar results.

SCABIES

The incidence of scabies—the standard of diagnosis being the careful extraction of a live mite—discovered by technicians (trained at the Sorby Research Institute) during a rapid survey of 6,818 school children in 1944, was 0.7% in the "good" schools and 0.75% in the "poor". Similar surveys of over 20,000 children are made yearly; the results

confirm the impression that there is now in this area negligible difference in scabies incidence as between children in good or poor circumstances. Scabies is an infestation (and often a family infestation) and not a dirt disease, and is spread in the home, through warm, personal contact—sleeping, embracing, dancing, etc.

VERMINOUS INFESTATION OF THE HAIR

This, on the other hand, appears to have a differential incidence. Over 1,900 Salford school children (examined to live lice, larvae and nits by two hygiene attendants trained to look for larvae and lice, with ample time to conduct thorough examination of the scalp) were also classified according to schools. It was found that boys and girls together in the "poor" schools had over 5 times as many infested heads (either live lice, larvae or nits) as the "good" schools—24.4% as compared with 4.6%. The incidence of live lice was 14% against 1.1%—nearly 13 times as great. When the sexes were considered separately, the boys from "poor" schools were 13 times more infested (live lice, larvae and nits) than those from "good" schools (13.1% and 1%). The "poor" girls were 4½ times as bad with 37.3% against 8.3%.

FOOTWEAR

The above 1,900 children formed part of a foot survey conducted by senior chiropody students of the East Lancashire Foot Hospital; they worked in pairs, under supervision, using an agreed standard of examination and including exact measurements by foot-rule. Measurements for accuracy of fitting showed that only a small difference existed between the "good" and "poor" schools—67% and 69% were accurately fitted. The influence of improved social conditions on the wearing of "stylish" footwear was perhaps reflected in the fact that only 2.5% of the boys in "poor" schools wore shoes two sizes too small, whilst 5.4% of boys in "good" schools suffered from this defect. The difference in the serviceability of the footwear was more apparent. The "good" schools had only 3% of children with footwear considered in very bad condition, but the "poor" schools had 13%. With the boys this proportion was 4% "good" and 16% "poor".

NEED OF ORTHODONTIC TREATMENT

A survey of 1,000 children as regards need of orthodontic treatment in five Salford schools, was made in 1946 by the school dental surgeon and showed little significant difference between classes of schools.

INFLUENCE OF HOME AND ECONOMIC CONDITIONS

Analysis of the results of investigations shows that the heights and weights of children living in "bad" economic or home conditions were consistently less than those of children in "good" home or economic conditions, the differences being 1.7 to 2.6 inches taller, and 2.0 to 9.3 pounds heavier in "good" home conditions, and 0.6 to 1.4 inches taller, and 0.5 to 5.6 pounds heavier in "good" economic circumstances. Also the incidence of various disorders, such as impetigo, sepsis, stomatitis,

coarse and dry hair, dry skin, round shoulders, deformed chest, etc., increased with worsening social conditions.

ENVIRONMENT AND PSYCHOLOGICAL INFLUENCES

Our figures on footwear suggest that it is more than four times as important for a child to have a good Mother than a rich Father!

Environment, according to the dictionary, means "that which surrounds". In respect of child life one conjures up a picture of the house and district in which the child lives, the state of the backyard and lavatory, the degree of air pollution, the purity of the water and milk he drinks, the sanitation of his school premises. This is the truth but not the whole truth. It is mother love and psychological care that surrounds him more closely than bricks and mortar, household gadgets and open spaces. During the war a number of Salford children were sent to an up-to-date evacuation camp; there were first-class sanitary conditions, and all was done for them that could be done in every way. They had an open-air life, swimming facilities, excellent supplies of rationed, unrationed, and priority foods, yet the control groups of children at home in the city grew better than the children in camp.

I had hoped, naturally enough, for decisive results in health improvement in return for the vast cost of time, trouble, and money expended on a camp school. I had expected the rate of growth of the boys in the country to be remarkably superior; it was not even equal—it was inferior.

After allowing for any possible fallacies in this comparison I can think of no better explanation than that the camp boys were separated from home and family life. (They did not complain although one boy did say, "I *would* like my people here.") I believe that children pine for affection and the fulfilment of mind and body which can result from the close contact of their parents. If this is true, it is small wonder that the boys did not derive more benefit from what was an ideal physical environment. I understand that similar investigations elsewhere showed a similar result. So one is forced to the conclusion that the family factor counts every time.

THE PLACE OF THE MOTHER

A war-time social survey in my area surprised me by showing that the nutritive content of our school meals, in which I had taken pride, was inferior in Vitamin C and most other measurable nutriments to the dinner provided by the working class housewife in her own home. I had certainly underestimated her capabilities. Even the somewhat neglectful mother, frequently criticised and derided, came out well when the figures showed her to have provided better meals for her children. In homes where there is reasonable affection, I am sure that the child does better in health than by our carefully planned menus at school. The mother is unique and irreplaceable. From her spring spiritual and psychological forces which, although unseen, are as potent for healthy growth as nutrients and vitamins which can be seen and measured. The family factor seems of greater importance, according to investigations as yet unpublished, than economic or physical conditions.

We have reason to believe that a child sleeps better at home and has

greater mental rest. Teachers and social workers were agreed that the incidence of enuresis, often a symptom of anxiety, seemed much higher at the camp school than in the home. The two most successful institutional experiments of the last 25 years—the Peckham Health Centre and the Papworth Village Settlement—have been based on the supreme value of family life. Mother craft and homecraft are both best taught and best learnt in the home. We must do more to welcome the parent in the school. We can encourage the Parent Teacher Association, the open days when parents may see the work done for their children and can catch something of the spirit of modern educational methods. We can encourage more community centres which will support the family. Any project which improves the quality of family life helps child health fundamentally and decisively.

THE PREVENTION OF DISEASES OF THE NOSE, THROAT AND EAR.

MR. E. M. DEARN

The nose and throat are the body's first line of defence against the invasion of disease.

Air, or rather oxygen, is as necessary to health as food, and it is by the nose and throat that air enters the lungs and starts the cycle of healthy life. The rôle of the nose in this cycle is to warm, moisten and purify the inspired air before it reaches the lungs; and hence any affection of the nose which in any way modifies these functions handicaps, by so much, the health of the whole body. Unless a certain quantity of air is supplied to the lungs, life can only proceed upon a low level, and it is for this reason that any sort of blockade of the nasal passages is so serious. A healthy nose is an item of physical capital which renders one almost completely immune from many of the diseases which tend to thrive under the vagaries of our climate. If the nose is unhealthy, if the passages are interrupted, mouth breathing is induced and the individual is made liable to a number of diseases. Apart from the discomfort from mouth breathing, the increased effort, the feeling of dryness and stiffness about the throat, the chest tends to underdevelopment, the mind to become dull and inert, and the lungs are laid open to serious disease. The importance of preserving the nose and throat in as perfect health as possible is therefore clear.

There is a close connection between the senses of Taste and Smell, and many aromatic substances that are usually considered as "tasting" characteristically are really so "smelt". A cold in the head effectually stops the perception of aromatics. In every day life it is most essential that the sense of smell should not be interfered with to any great extent, as it is largely by this sense that the air we breathe is known to be pure or not. In a crowded atmosphere the air soon becomes contaminated and smells foetid. It is remarkable how soon the nerves of smell become exhausted and so fail to give warning that the air has been rendered unfit to breathe and has become dangerous. This explains how soon we become accustomed to being in a used-up air, and remain breathing it until the

stage of headache arrives. The upper nasal region, where the sense of smell is localized, becomes obscured and clogged, and the passages are blocked by an accumulation of nasal secretions, which always accompany a cold in the head, and so the access of air to the upper and olfactory regions is prevented. Proper use of the nostril muscles helps in the ventilation of the nose.

PREVENTION OF COLDS AND NASAL CATARRH

In children the commonest cause of repeated colds is the presence of adenoids. The only real cure for adenoids is the proper removal by operation, and subsequently the practice of nasal breathing exercises. Adenoids, so frequently, are responsible for catarrhal or suppurating otitis media, hence any apparent enlargement of the adenoid tissue should receive surgical attention. Another common defect is deflection of the nasal septum. This may be injured even at birth when the nose may be severely compressed, and the septum becomes swollen through the extravasation of blood. From the cradle, the perambulator, and in the nursery, falls and bumps on the nose are common. How familiar a sight is the child's sudden spurt, a trip of the toe, and a fall forward on the nose. The after consequences of these recurring family domestic episodes is an interference with the upward straight growth of the septum; spurs and ridges project from it, and the result is a curtailment of the calibre of the nasal passages; sometimes on one side, sometimes on both. This explains why nasal headaches, catarrh, hay fever, asthma etc., are so often, and so easily contracted in some persons, and never met with in others. These deflections render the victims of them liable to fall an easy prey to inflammation of the already chronically congested, soft, and very vascular lining membrane.

Injuries of the nose, even if there is no external deformity, should be examined by the expert in order to detect any internal deformity. Deflections of the nasal septum frequently interfere with the proper drainage of the nasal Sinuses, and so may be responsible for recurring headaches and sinusitis—acute or chronic. Unilateral nasal discharge should make one think of a foreign body, especially in the case of a child, although it may arise from unilateral sinus infection. Modern methods in the prevention of recurring colds are various. Some find help from anti-catarrhal vaccines administered by injection each autumn. Others find help from a preparation in tablet form (Serocalcin) taken intensively over a period of three weeks, or more intensively if a cold should develop. The smearing of a little Penicillin ointment, into the nostrils each evening, appears to help some people who have to mix with many others in buses, trains etc., where infection is so easily passed on, but Penicillin is not a cure-all. Acute Sinusitis may be treated by an intensive course of Penicillin together with lavages of any infected nostril, and the use of inhalations. The mucous membrane of the nose is lined by cells possessing cilia which have a protective action. In dry atmospheres the action of these cilia is much impaired. Dust also adversely affects them. Moist atmospheres—wet weather or seaside—are beneficial. If the nose becomes very dry a warm saline or weak bi-carbonate of soda solution, sniffed up the nose, will help matters. Hay fever is now helped by the use of Benadryl—one capsule twice or thrice daily.

One must not overlook the fact that children, catching colds repeatedly, may be infected by either parent having a chronic Sinus infection, so that it may be advisable to check over a whole family in an endeavour to help the younger members of that family.

PREVENTION OF THROAT AILMENTS

The majority of these depend on a nose disturbance for their incidence and origin. It is just as unnatural, unphysiological, improper and absurd, to pass air through the mouth as it would be to pass food and drink through the nose. Mouth breathing is caused by nasal obstruction. Inspired air should be filtered from dust, warmed up to the temperature of the body, and saturated with moisture before reaching the throat; these are all done if it is taken in through the nasal passages, but if not the inhaled air reaches the throat at too low a temperature; the mucous covering of the throat gets chilled, and its blood circulation is impaired, leading to congestion. If moisture is not added to the air during inspiration through the nose, such dry, or semi-dry air, absorbs moisture from the throat, thus causing a dryness in the mucous membrane. A dry mucosa is more liable to inflammation than a moist one. Carious teeth and pyorrhoea may set up a chronic irritation of the mucous membrane of the pharynx. Septic tonsils may discharge matter into the pharynx or even into the larynx, causing irritation. Unhealthy tonsils may be responsible for a bad odour in the mouth. Drinking hot liquids regularly can have a deleterious effect on the delicate mucous lining of the throat. Nature does not intend us to take food too hot or too cold. Tobacco smoke also has a bad drying effect on the mucous membrane, causing chronic inflammation. Gingivitis and Vincent's Angina may be spread by the improper washing of cups and glasses in cafes, canteens etc.

PREVENTION OF EAR DISEASE

One of the commonest causes of deafness is the presence of wax: during hot weather this may be softened and the ear becomes blocked up, Sea bathing may accelerate the blocking of some ears. Unskilled attempts at the removal of wax from an ear may lead to abrasions of the meatal wall, setting up an inflammation, or boils, which may not so easily resolve. A prolonged eczema of the ear may occur as the result of poking in the ear with pins or other objects, or by scratching with a finger nail.

Catarrh of the Eustachian tube may easily arise from neglected nasal obstruction or nasal catarrh, or even mild colds. Too forcible blowing of the nose may project infected mucous or pus, from the nose, up one or both Eustachian tubes with adverse results. Chronic catarrhal deafness and blockage of these tubes can easily arise if the acute stages are neglected. Acute suppuration in the middle ear is now frequently aborted by incision of the drum if the latter is bulging, by the use of inhalations, in an endeavour to re-open the blocked Eustachian tube, and by the injection of Penicillin. Many cases of mastoiditis are similarly treated and operation avoided.

If acute ears are properly attended to, the elimination of chronically discharging ears will steadily increase, with benefit to large numbers of

the population, and a lessening of the toll of deafness due to discharging ears. Hydrogen peroxide and spirit is the worst treatment: just mop up the discharge and dry by filling the ear with boracic powder once or twice daily.

No one with colds or catarrh should go to the public baths, or swim, as infection can easily be passed on to others. Swimming may also be responsible for infected matter passing from the nose to the ears via the Eustachian tubes.

The nose, throat and ear depend to a great extent on the general health of the body, which is maintained by food, fresh air and clean living. An adequate diet—good food in a sufficient amount, with all the necessary vitamins, fresh fruit and vegetables—is very necessary in the maintenance of health.

As a prevention against some of the defects of being hard of hearing lip reading should be practised before a person becomes very deaf. Hearing aids may help, but one practised in the art of lip reading, will enjoy life much more by its use. Lip reading was first recorded in history in the 7th century. The Venerable Bede, who was a pupil of St. John of Beverley, records that in the year 685, his master, the Bishop of Hexham, made a dumb boy speak. St. John was the first real teacher of lip reading, and Bede chronicles his method. St. John is the patron Saint of the deaf of the Church of England, and a pilgrimage is made by them every May to the beautiful Gothic Minster of St. John, at Beverley, where a special Communion Service is held for them. The Lecturer concluded with a quotation from W. Spencer Leeming—

THE WAY OF HAPPINESS

Seek health where'er you be:

And, when it's found,

Preserve its golden key—

The joys around

Will else be dull, drab things;

Nor wealth nor might

Alone can lend you wings

Of true delight.

CHILD GUIDANCE

DR. H. EDELSTON.

Introduction. You had a lecture yesterday on “The Influence of Home and Social Environment on the Health of School Children”; this probably dealt with the “external” circumstances in the home, and how those, if good, make for healthy children. But bricks and mortar, fresh air, calories and vitamins do not go the whole way. Something more is necessary, especially in the case of the “Problem Child”.

Environmental Factors are of two kinds,

1. Material—food, clothing, housing etc.
2. Immaterial or psychological: the relationships between the various members of the family i.e. the emotional atmosphere in the home.

With problem children this second can be more important than the first. Young children are especially susceptible to "atmosphere" in the home. The unhappy, emotionally disturbed child often suffers from vague indefinite illnesses: "Always ailing and never ill" it has been said. The speaker went on to explain the effects of emotional stress on health. He gave instances of various secret worries that beset children: unhappiness at school, parental conflicts, feelings of failure—(contrast these with elation at success)—etc., etc. There are numerous sources of maladjustment which can give rise to symptoms either of a physical kind (e.g. a tic or facial twitch) or of a more mental kind, i.e., a problem in behaviour.

At the Child Guidance Clinic we deal with these emotional factors and the illnesses and behaviour problems set up by them.

How do the children get to us? (i.e. who brings them?)

1. Home—Parents or doctors write or ring up.
2. Hospitals refer patients seen by them.
3. School—Teachers—Attendance Officers—School M.O's.
4. Juvenile Court—Magistrate or Probation Officer (but less than 10% come by this means).
5. Other Social Agencies—Foster Homes, N.S.P.C.C., Churches.

Particular cases and their symptoms.

Shirley 5½ yrs. (Brought by Mother)—refused to go to school—was nervous of strangers etc.

Gordon 6 yrs. (Brought by Foster Mother)—Wild destructive behaviour: "brain storms".

Doreen 7 yrs. (Referred by School M.O.) Attacks of screaming (fears) nightmares etc.

Malcolm 7 yrs. Bedwetting, nightmares, rages.

and others through habit spasms, fears, enuresis, asthma, fainting, headaches, sickness of emotional or nervous origin, and behaviour problems, especially stealing.

Not all cases are so severe and at times we are asked for straight advice about school or work. Even here however it is usually because of some abnormality in behaviour or other disturbance.

What do we do in the clinic? All cases are seen by appointment.

A first examination usually lasts about two hours. We investigate carefully to uncover as far as possible the source of the child's problem.

N.B. We avoid as far as possible "lecturing" either child or parent.

The clinic is not a place where we give advice on how to bring up children but it is essentially for the treatment of nervous and maladjusted children—any advice on general lines is only incidental to the main purpose of treatment.

(The speaker here interpolated the important psychological insights of the great novelists and dramatists and mentioned that one could find a good deal on psychological treatment in the Bible itself.)

A piece of advice to anyone working at a child Guidance Clinic is "Listen before you talk, and when you have listened, listen again; and

even then, don't give advice too quickly''. The mother wants to talk to someone who will understand and sympathise, so always make it appear that you have plenty of time to listen, and then you will get the story more easily and more quickly.

- The Clinic Staff**
1. A Psychiatric Social Worker (''P.S.W.'') whose duty it is to draw out the whole story from the mother (or parent).
 2. An Educational Psychologist to examine the child's capacity and make an estimate on his character etc.
 3. A Psychiatrist who examines the child directly and relates the information from (1) & (2) and their bearing on the child's present problem.

Time, infinite patience and great skill are necessary for all workers in the clinic. Psychiatric examination of children is a highly specialised job for it is by no means easy to get them to tell their story. It is important to get the child to feel at ease and many auxiliary methods can be employed to help with this. If quite young ask him what he would like to play with: he may like to draw, or play with plasticine or bricks; by these means a lot of his thoughts or troubles may be shown. Or if older engage him in conversation about his hobbies or pursuits, home or school.

The speaker gave various examples of the sort of findings this kind of examination reveals and the treatment suggested accordingly. This latter may be anything from a simple change at school where all that is wrong is that the work is above his capacity, to the more serious delinquent cases needing removal from home. Some of the nervous (''highly strung'') children are treated by a special method called ''Free Play''. There is a special play room at the clinic where the children are allowed literally to play with whatever toys they like and in whatever way they like. Some take to it straight away: others take a time to loosen up; some are scared at first at the unwonted freedom. As they become more thoroughly at their ease there may be some very boisterous play—corresponding to turmoil in the children's minds. The room will probably be very untidy, probably messy if little ones have been playing with water or sand; there may be drawings on the walls, but all this is necessary when allowing free play (a certain portion of the wall space in the clinic room is set apart for drawing purposes). By these means emotional tension in the child's mind is relieved with consequent amelioration of symptoms. At the same time the parents can talk things out with the psychiatric social worker. Sometimes parents themselves need treatment for their own personal problems. After a time there should be a readjustment of attitudes all round; from every body being over anxious or exasperated we get a calmer genuine co-operation developed; there develops a more healthy relationship in the family and to other people.

In this work one learns a lot about children, and a lot about parents. For example that a bad home is better than no home life at all. Do not send a child away if it is at all possible for him to remain at home: rather endeavour to reconstitute the home life on sounder psychological lines.

SAFE-GUARDING FOETAL AND NEO-NATAL LIFE.

DR. V. MARY CROSSE.

Because of the declining population due to a reduced birthrate, it is most important to save all the babies that are born.

Since the beginning of the century the infant mortality rate of England and Wales has been considerably reduced but the reduction in the still births and neo-natal deaths has been much less marked. If more babies are to be saved it is therefore chiefly in the neo-natal deaths and still births that improvements will have to take place. The results in New Zealand and Holland before the war show that such a reduction can be obtained.

In order to prevent these mortalities the causes of mortality must be known. The chief ante-natal cause of still birth is toxemia, and the chief intra-natal cause is intra-cranial birth injury. Foetal deformity is also a common cause.

As regards neo-natal death, the common causes during the first week are prematurity, birth injury and foetal deformity. After the first week, infection is the greatest cause of death. Prevention can be considered under the following headings:—

Ante-natal causes.

1. *Toxemia of pregnancy*. Deaths due to this condition can be reduced by improved ante-natal care, including a good diet and early recognition and prompt treatment of cases of toxemia.
2. *Syphilis*. Routine blood tests and early treatment of mother and child has done much to reduce deaths from this cause.
3. *Rhesus factor*. A routine blood test with a follow up of Rhesus negative mothers and hospital treatment of cases developing agglutinins, are recommended.
4. *Other ante-natal causes*, are also reduced by improved ante-natal care.

Intra-natal causes.

1. *Breech*. The high mortality attending breech deliveries can be reduced by more extensive employment of external version and hospitalisation if version is impossible. In hospital, breech deliveries should not be left to inexperienced junior medical officers.
2. *Other difficult deliveries*. The chief cause of difficulty is the persistent occipito-posterior position. Mortality due to this cause may be reduced by early diagnosis and rotation into the anterior position whenever possible before applying forceps.

Other causes in this group, i.e malpresentation, disproportion, etc. should be reduced by good and thorough ante-natal care.

Post natal causes.

1. *Infection*. In hospital, infection can only be reduced if the numbers of babies in each nursery are limited, with good ventilation and spacing of cots, facilities for isolation, careful barrier nursing, separate equipment whenever possible and facil-

ities for sterilising communal equipment between babies, with the wearing of adequate masks by all attendants and with due precautions for the prevention of dust-borne infection. In the home a separate room should be available for mother and baby and no visitors allowed in this room.

2. Other causes, e.g. Haemorrhagic disease and Hemolytic disease. The reduction of mortality from these causes entails the provision of paediatricians both in hospital and for consultation on the district, and provision of hospital accommodation for sick infants, to which they can be admitted with their mothers.
3. *Prematurity*. Prevention of death from this cause is dealt with in a later lecture.
4. *Foetal Deformity*. Little is known about the causes of this condition but heredity and environment both have their places. Diet during pregnancy is probably an important factor.
5. *Unknown Causes*. Social status has been proved to be an important factor in these mortalities as shown by the Registrar-General's figures for England and Wales, Professor Dugald Baird of Aberdeen and various diet experiments carried out in England, Canada, Norway, etc. Wolf and Waterhouse (Birmingham, 1945) showed overcrowding, poverty and employment of a mother to be important preventable causes of both still-birth and neo-natal death.
Improvements have occurred in both the still birth rate and the neo-natal death rate within recent years, but we still have a long way to go.

THE PREMATURE BABY.

DR.V. MARY CROSSE.

The international definition of prematurity is accepted in Great Britain, i.e. a baby weighing $5\frac{1}{2}$ lbs. or less at birth.

The importance of prematurity is shown by investigations undertaken in Birmingham recently. These show that, although only 6 per cent of the live births are premature, these premature infants form 40 per cent of the still births, 33 per cent of the deaths under one year and 60 per cent of the deaths under four weeks.

Various investigations have proved that premature babies are worth saving. In Birmingham less than 1 per cent of all premature births, show abnormality, either physical or mental, at the age of a year.

There are obviously two ways of reducing the mortality due to prematurity—

1. The reduction of the incidence of prematurity.
2. The reduction of the death rate in premature babies during and after birth.

In order to obtain this reduction one must know the causes of the incidence of prematurity and the causes of deaths in premature babies.

The cause of premature birth is known in approximately 60 per cent of Birmingham cases. Maternal ill health (especially toxemia), multiple pregnancy (twins, triplets, etc.) and foetal deformity, are the

three chief causes. As regards the 40 per cent unknown cases, diet experiments and the observations of various people with regard to social conditions, show that these are important factors in the prevention of premature birth.

Prevention of prematurity will therefore include better ante-natal care supported by the provision of a sufficient number of beds for the treatment of abnormal ante-natal conditions.

With regard to the causes of death in the premature baby during the first four weeks of life, uncomplicated prematurity accounts for approximately 65 per cent., intra-cranial birth injury for 12 per cent., infections for 11 per cent and foetal deformity 4 per cent.

In comparison with the child over 5½lbs. at birth, the premature baby is 22 times more liable to die, during the first four weeks of life. It is nine times more liable to die from intra-cranial birth injury; nine times more liable to die from infection and five times more liable to die from foetal deformity, than the child over 5½lbs.

In order to avoid death from intra-cranial birth injury special care should be taken during delivery. Uterine stimulants which produce precipitate labour, and anesthetics which depress the child's respiratory centre should be avoided; so also should unnecessary interference with normal labour. Benefit from the use of vitamin K is a controversial point.

Deaths from prematurity are reduced by avoiding loss of body heat (warm room, warm cot, suitable clothing and minimum exposure); aspiration (minimum handling, position in cot, etc.); starvation and gastro-intestinal disturbances (a special lecture is given later on the subject of feeding.)

Deaths from infection may be considered under the headings of dust-borne, droplet, and direct or indirect infection. The first is avoided by oiling floors and blankets, by damp dusting and cleaning and by the reduction of traffic through the wards. Droplet infection is reduced by the wearing of adequate masks, the elimination of visitors and infected staff, by cot spacing and good ventilation. Direct or indirect infection is reduced by the use of gowns, hand washing, individual equipment and a good technique in the care of linen and feeding.

Home care versus Hospital care: hospital care is indicated for the smaller infants with feeding or respiratory difficulties, who for this reason require the 24 hour services of a trained nurse. Transport must be provided for infants born at home who require hospital treatment.

SUMMARY.

A scheme for the reduction of mortality due to prematurity must therefore include:-

1. Measures to reduce the incidence of premature labour.
2. Provision of care for premature babies during and after an inevitable premature labour. This includes home equipment on loan and a trained nurse for home care; suitable hospital accommodation for smaller infants; transport; the provision of breast milk when required and last but not least, education of doctors, midwives and health visitors in the care of the premature infant.

FEEDING THE PREMATURE BABY

DR. V. MARY CROSSE.

A premature baby has various deficiencies which make this subject of feeding a very important one; e.g. its power of suction may be weak or absent; the swallow reflex may also be weak or absent; it shows an increased liability to regurgitation and the regurgitated fluid may be inhaled owing to the absence of the cough reflex; the digestive powers are poor in the smaller babies; and there is a greater need for fluid.

1. *The best kind of food.* Breast milk should be given whenever possible.
2. *Daily fluid and calorie requirements.* Sufficient food should be given to maintain life and avoid underfeeding; but overfeeding which is even more dangerous, should also be avoided. Survival is more important than a rapid gain in weight and minimal feeding gives the highest survival rate. It has been found in the Birmingham Premature Baby Ward that the average daily fluid requirements are as follows:-
By the middle of the first week 1 oz. per lb. daily.
By the end of the first week 2 ,, ,,
By the end of the second week 3 ,, ,,

As regards calories, it is usually found that premature babies can deal with 40 to 50 calories daily by the end of the second week and after that they require 50 to 60 calories per day to maintain a steady gain.

3. *Methods of giving feeds.* If the baby can suck it can be put to the breast (if strong enough) or given a bottle. If it cannot suck but can swallow, a pipette or dropper may be used. If it cannot swallow, feeds must be given by catheter.
4. *Size and Frequency of Feeds.* The first feed is not usually given to a premature baby until 6 to 12 hours (even longer in very small infants) after birth, because of the inco-ordination of the swallow reflex directly after birth. The frequency of feeding depends upon the amount the child can take before becoming tired. Small babies will only take small amounts and therefore feeds must be small and frequent. Catheter feeds are given every three or four hours, as relatively large amounts can be given at one time.
5. *Artificial feeding.* If breast milk cannot be obtained, cow's milk must be modified in such a way as to reduce the fat content and render the protein more digestible. Sugar is well tolerated. When a high protein feed is indicated—i.e. for the very small infants, hydrolised protein may be ordered by the doctor. Vitamins are extremely important for the premature baby; relatively large amounts of A, B, C, D and K, being required, and the doctor's orders must be carried out. Preparations containing calcium and Phosphorus may also be ordered for a premature baby but there is little evidence that the administration of iron is much good during the first few weeks of life.
6. *Preparation of Feeds.* Because of the extreme liability of the premature baby to infection, scrupulous cleanliness is necessary in the preparation, storage and administration of feeds.

PERSONALITY THROUGH SPEECH

MISS FREDA PARSONS

Sir James Barrie has said that the mind is like a garden. Each mind garden is surrounded by a wall of reserve in which there are three gateways. Those who decide to make Public Service their life's work decide metaphorically to share their thoughts and ideals of their mind garden with the world without.

To do this the Ego or Personality must be able to pass freely through the three gateways—the gateway of facial expression—the gateway of physical poise, and the gateway of speech. A refresher course not only refreshes and stimulates the ideas in the mind garden—the easy movement of the gateways should also be tested—it is so easy in the world of to-day to become lackadaisical or mannered, in the expression of our ideas. If we are unable to pass easily through these gateways we are conscious of a shyness or self-consciousness, which is not only an unpleasant sensation for ourselves, but embarrasses also those with whom we come into contact. Those who are unable to get through their gateways are often labelled nonentities. But it is impossible for anyone to be a nonentity as all mind gardens are different—everything different is interesting—and Personality is after all just that interesting difference recognisable in each mind garden. To be recognised in the world without however—the Personality must be able to pass easily and happily through the three gateways.

(1) The gateway of facial expression—the value of this gateway was well realised in early times. The Greeks always insisted that the players in dramatic festivals wore masks portraying the predominating emotion of the part enacted—realising that if the emotions of the play could enter through the eyes of the audience, as well as through their ears, there would be two ways of approach instead of one. To-day the value of facial expression is so little stressed that it is the usual thing for growing girls to make up, and accentuate the features of the face, this tends to nullify facial movement, as a made-up face looks best in repose. Face muscle exercises which can be devised by each individual are necessary to enable the muscles to be used as a means of expression for the Personality.

(2) The gateway of physical poise, again with exercises as used by the early Greeks, gave them, as a race, wonderful powers of expression through grand bodily poise and movement. We have records of this in the wonderful statues and frescoes still preserved in the world's museums. The value of expression through this gateway is very little stressed to-day. At school physical exercises giving muscular strength are given, but very little mime or classical dancing, both of which express personality through movement, are done as a usual school subject. Exercises to relax the hands and arms so that they can be used in easy natural gesture are recommended—as easy stance and with balanced poise also give the Personality easier outlet through this gateway.

(3) The gateway of speech is the chief gateway through which the Personality passes from the world within to the world without. The

muscles contributing to the easy working of this gateway—the jaw, the tongue, and the top lip must do special exercises keeping them in good working order, enabling the speaker to develop a fine voice resonance—and a clear alive articulation helping the Personality to use the gateway, appealing persuasively to the heart of the listener, and convincingly to his mind. A Dialect is a lazy use of the speech gateway—a speech Defect is the wrong use of the gateway due to poor co-ordination of movements or a damaged gateway. Children suffering from such speech defects as stammering, cleft palate speech, lisping or any form of aphasia are helped to re-stimulate sleepy tissue or poorly co-ordinated muscles by play exercises arranged around the antics of a little paper man called Toney, who jumps, skips, hops or walks to their bidding by blowing; or the saying of special speech rhyme devised for this purpose. When the speech gateway opens easily we can all agree that:—

Talking is fun—talking is fun!

But only if everyone can understand the words we say. So everyday and all day we must use our machinery the right way. Thus to talk will be fun—really fun—to you and me and Everyone.

BREAST FEEDING AND WEANING

DR. T. MORTON STEWART.

Breast Feeding

From the earliest times down to the present day the importance of breast feeding has been stressed again and again. Here is a quotation from the writings of Galen, who lived about 130 to 200 A.D. "Hence children fed on the mother's milk are not only having the customary food but also the most proper, and nature seems not only to have prepared such nourishment for infants, but at the same time to have endowed them with an inborn faculty, enabling them to use it. For if you place the teat in the mouth of the child just born it sucks and swallows most readily." Again, in Still's book there is a quotation from the writings of Dr. William Cadogan in 1768, in urging mothers to suckle their children he says: "There would be no fear of offending the husband's ears with the noise of the squalling brat. The child, was it nursed in this way, would be always quiet, in good humour, ever playing, laughing or sleeping. In my opinion a man of sense cannot have a prettier rattle (for rattles he must have of one kind or another) than such a young child."

One of the earliest Infant Welfare Centres was established in London in 1816 by Dr. J. B. Davis. He was a staunch advocate of breast-feeding and taught—"The Mother's Breast is an infant's birthright and suckling a sacred duty, to neglect which is prejudicial to the Mother and Fatal to the child." In those days mortality and morbidity of infants artificially-fed was very great, and, although great strides have been made, there is still room for improvement. Breast-fed infants are less likely to contract infections. During 1942 and 1943, 167 infants were admitted to the Hospital for Sick Children, Great Ormonde Street, suffering from gastro-enteritis, and of these only one was breast-fed on admission. In Toronto it was found that out of 1500 children

under one year admitted to a certain hospital 15.1% were breast-fed, or had been up to the age of eight months, and 55.7 had never been breast-fed, or had been weaned before the age of six weeks. Only 7.5 % of the breast-fed had gastro-enteritis compared to 26% of the artificially-fed.

Now consider the process of digestion in infancy. The capacity of the stomach of the infant at birth has been estimated at 30-35 c.c. (30 c.c. = 1 ounce): at four days 45 c.c. (about $1\frac{1}{2}$ ounces); in the second week 75 c.c. ($2\frac{1}{2}$ ounces), and at the end of the first month 100 c.c. ($3\frac{1}{2}$ ounces). The child's stomach empties more rapidly than that of an adult, the first food beginning to pass through the pylorus in about five minutes. The stomach is normally empty in one to three hours, but the rate of emptying varies in different infants. 'Hunger waves' therefore appear sooner after a feed in some than in others. Hunger contractions occur when the stomach is empty, and, according to an American authority in 1915, appear at intervals of 10 to 15 minutes. The average interval between feeding and the next hunger pain in the new-born is two hours and fifty minutes; in a child of two weeks to four months the average is three hours fifty minutes. This knowledge is therefore useful in the feeding of babies. Some secretion is present in the breasts during pregnancy, but it is only some days after the birth of the child that a free flow of milk is established. It is possible that secretion is inhibited during pregnancy by some influence coming from the placenta. This would be removed by parturition. It is believed that prolactin, a hormone of the anterior pituitary, promotes the secretion of milk. It has become increasingly evident that preparation of the breasts for breast-feeding should be commenced during pregnancy, and that advice and encouragement should be given, especially to primipara.

Preparation of the breasts should be begun in the later months of pregnancy. The breasts should be bathed once a day and dried with a rough towel. The patient should be warned against wearing tight clothing which presses on the nipples and the breasts. Heavy breasts should be supported, otherwise the breasts become pendulous and the circulation, especially of the lower parts, interfered with. If the nipple is retracted it should be pulled out, and the surrounding tissue gradually pressed away from the nipple. There are two reasons why the nipples become damaged. One depends on whether it can be easily drawn away from the breast and into the baby's mouth. The other is the occurrence of engorgement with oedema. If oedema is present the nipple surface is easily damaged and when there is engorgement the nipple cannot be drawn out. Dr. H. Waller advises a glass shield with a central opening being worn under a firm support. This presses the nipple through the opening and gradually loosens and stretches its attachment to the deeper structures of the breast. It is usually sufficient if these shields are worn for the greater part of the day during the last three months of pregnancy.

In order to correctly understand breast-feeding it is essential to know what is the proper grip for the baby to take. The collecting sinuses of the breast are under the areola and it is necessary for the baby to take a hold of that, drawing the nipple well back into the mouth. The important movement is not only suction, but is that of the gums

which rhythmically express the milk from the sinuses. In addition the breast itself expresses the milk soon after the baby sucks. One can see this when, if the baby is withdrawn from the breast, the milk can be seen spouting from the breast. This is felt by the mother as a contraction of the breast and is known as the "draught."

Failure of Lactation. How often is heard in the Welfare Centre the statement, by a mother, that her milk went as soon as she was up, or as soon as she went home from hospital or nursing home. An analysis of 1,100 cases of premature weaning was carried out in 1943 by Dr. Margaret Robinson. She found that 53% occurred in the first month, and that in 40% of these there was no adequate cause. Observations showed that the normal cycle consists first, of a period of filling, lasting from 10 to 30 minutes, secondly, a period of emptying, lasting 5 to 7 minutes, during which the milk issues from the breast in rhythmic jets, at the rate of 40 to 50 jets per minute, thirdly, a refractory period, lasting two and a half to three hours. Evidence has been adduced that the pumping mechanism is controlled by the anterior lobe of the pituitary. Dr. Robinson described four types of failure:—

1. Dry, in which the total secretion is inadequate.
2. Wet, in which the mothers note that the milk is like "blue water," the breasts are soft and there is persistent lactorrhoea. This suggests endocrine hyper-activity in emptying.
3. Solid, the breasts are heavy and nodular, and the baby refuses to suckle or empty the breast. The secretion is thick and creamy, and the pumping mechanism appears to be absent. The defect appears to be in both fluid secretion and emptying.
4. Complete absence of lactation. This is rare and in her series occurred four times, and in each case it was after a difficult labour. Health conditions in the mother were nearly four times as common a reason for failure as were causes associated with the infant.

Dr. Waller has stated that there is a wide variation in different individuals in the rate and degree of filling of the breasts, and also in the freedom of the milk's outflow; the extremes present two distinct clinical types: 1. No great enlargement or tension of breasts—filling gradual with instant escape from the nipples—no feeling of discomfort—by about the tenth day the leakage is intermittent and fullness and tension bear a relationship to feeding intervals; this is the "draught reflex" which is not usually realised before about the third week.

2. Onset of secretion rapid, little or no leakage; tension increases and breasts become hot, heavy and greatly enlarged, the skin tight and glistening, the breasts are oedematous and "knotted." The most striking point however is that no milk escapes, nor can it be induced to by any means, and the sucking of the infant is completely ineffectual.

In between these two types are the intermediate cases showing all varieties of tension.

Increased tension leads to lack of secretion and, if prolonged, suppresses it altogether; it is therefore necessary to reduce tension as quickly as possible. Experiments on these lines were carried out in hospital—hand expression by the nursing staff was found to be successful

in moderate cases. Some patients were taught hand expression in the last weeks of pregnancy—untaught “controls” were also taken—there was found to be a marked difference—the daily amount of milk taken by the babies of the “pupils” was greater than that taken by the babies of the “controls.” The cases of engorgement were much greater in the control patients, and the number of cases of injury to the nipples was double in those who had not been taught expression; at the end of six months 83% of the “pupils” were breast feeding entirely, and only 42% of the “controls.”

To prevent engorgement stilboestrol 5 mgms. 4 hourly has been successful; for reduction in severe cases, 20 mgms. three times, followed by 15 and then 10 mgms., 4 hourly, may be necessary. When swelling and oedema begin to subside the milk should be expressed by hand, and feeding begun again as soon as renewed secretion is established.

Dr. Margaret Robinson has also made investigations regarding the use of Lugol's solution (5% idone in 10% aqueous potassium iodide) in cases of failure to establish lactation in the puerperium, her standard of establishment being 10 oz. on the fifth day and at least 16 oz. on the tenth day. Her own words will show the conclusions she drew from her investigations:— “failure to establish a satisfactory milk output in women is apparently due to two deficiencies, oestrogens and iodine. The need for oestrogens to control the milk flow through the breast is present in the first four days after labour; the need for iodine to increase the output of milk present is from the fourth day onwards. These deficiencies may be present singly or together. If together the oestrogens must be given first. Giving Lugol's solution to a case with oestrogen deficiency untreated, only aggravates the condition, and does not increase the milk output; the sign of an oestrogen deficiency is lumpy breasts with a thick yellow secretion that is difficult to express; the sign of an iodine deficiency is soft empty breasts with a scanty secretion of milk. Both oestrogens and Lugol's solution are easy and safe to give, the duration of the treatment is short, and does not upset either mother or child.

Dr. Robinson has commenced similar investigations in the failure of lactation at the end of the puerperium. She states that she has not collected a sufficient number of cases to draw any definite conclusions, but the outlook is hopeful; these cases are given ten minims of Lugol's solution in milk three times a day.

There are other causes of failure to keep up breast feeding which we all meet with in practice. In 1942 an investigation was carried out in Birmingham, on breast feeding, especially in relation to women in industry. Influences adverse to breast feeding were found to be:—

1. The doctor, who was found to be more than any single factor responsible for weaning babies; doctors are apt to take the baby off the breast when difficulties arise instead of trying to solve the problems of successful breast feeding.

2. Queuing for shopping.

3. Emotional disturbances, especially anxiety about husbands.

4. Part-time work.

In many cases we see interference by relatives as the cause of failure to breast feed.

In conclusion, I would like to put forward a few points for our consideration, and which you might like to discuss:—

1. Has breast feeding become old-fashioned?
2. The older paintings, sculptures and carvings all showed the Mother (the Madonna) with the Child at the breast. The newer pictures one sees now of babies are nearly all photographs of babies brought up on such and such a food, and extolling its virtues. Do you think that this trend has tended to diminish the incidence of breast feeding?
3. Do nursing mothers think there is something inferior or immodest about breast feeding?

In this paper I have tried to put before you some opinions as to the failure of breast feeding, and I hope it may prove of some value to you in your work.

Weaning. (1) ‘Early.’ (2) ‘Late.’

(1) Early weaning may be necessary in the first few weeks or months on account of illness of the mother or for some social reason. On the first day the mid-day breast feed should be replaced by a bottle feed; on the second day the 10 a.m. feed should be replaced; on the third day, the 6 p.m. feed and on the fifth day the 10 p.m. feed; any breast milk present should be expressed. On the seventh day the 6 a.m. feed should be stopped. If the breasts become engorged or painful they should be supported. It is advisable to draw off the breast milk at night to ensure sleep. The giving of Stilboestrol will diminish the secretion:—5 mgms. daily for 2 days, 3 mgms. twice daily for 2 days, then 1 mgm. twice daily for 2 days; a second course may be necessary.

(2) ‘Late’ Weaning is the term used for the substitution of breast milk by solid food. There is diversity of opinion as to when to commence this, but the tendency is to begin earlier than used to be the case. It is certain that exclusive milk feeding after the sixth month is insufficient for the infant’s needs and produces anaemia. It is easier to commence additional feeding at about five or six months, when the baby is showing interest in putting new objects into his mouth. One of the Aphorisms of Hippocrates, who lived about 300 B.C. says, ‘‘They that take other foods during suckling bear weaning the more readily.’’

It is unwise to commence weaning when the baby is ill, or during hot weather. It is the usual practice to begin mixed feeding when the baby is about 15 lb. in weight. Something more than breast milk may be given with benefit at this time. Start with a cereal and egg-yolk at 10 a.m. A few days later another cereal should be given before the 6 p.m., feed; in another few days broth or homogenised vegetables may be given at 2 p.m. These additions should always be given before the breast. There are several advantages of early mixed feeding. The protein and iron content of breast milk is low, and prolonged breast feeding results in anaemia. Few mothers can continue to produce sufficient breast milk to satisfy the normal 15 lb. baby. The introduction of spoon feeding with its variety of tastes and smells is important. It makes the feeding of older children an easier matter.

Time Table and Diet Sheet in detail

6 a.m. Both breasts, 7 minutes at each.

10 a.m. Milk 2 oz.; Water 1 oz.; Sugar 1 teaspoonful, adding to

this one to three heaped teaspoonfuls of one of the following cereals—Chapman's Wheat Food; Robinson's Patent Groats; Cream of Rice; Farex M.O.F., or Neave's Food. Half a teaspoonful of egg yolk may be given with this feed. After this feed give the breast.

2 p.m. The same milk mixture adding 1 oz. of bone and vegetable broth, and in addition 1 or 2 heaped teaspoonfuls of Heinz, Libby's or Nestles' homogenised vegetables.

6 p.m. The same as at 10 a.m. except that the cereal should be a different one. Finish with breast.

10 p.m. Breast only.

Fruit juice or ascorbic acid 50 mgms. should be given once a day, the most convenient time is between 8 and 10 a.m. Half a teaspoonful Cod Liver oil or 1 minim Halibut oil should be given immediately before three feeds in the day.

ARTIFICIAL FEEDING

DR. T. MORTON STEWART

When a mother is unable to breast-feed her infant it is necessary to find some substitute; there are two alternatives—cow's milk in some form or another, and the proprietary infant foods. While every effort should be made to encourage "breast feeding" it is not impossible to carry out successful "artificial feedings."

Whereas the fat content of cow's milk and breast milk is roughly the same, the other constituents show considerable difference. The protein content of cow's milk is higher, and the carbo-hydrate is lower, than in human milk. It is the usual practice for the first few months of life to dilute cow's milk when used for infant feeding. This dilution results in a diminution of protein, but it also brings about a diminution of caloric value, and this must be compensated for by the addition of carbo-hydrate and sometimes of fat. Cow's milk should never be used in a greater dilution than equal parts of milk and water, and after the first few weeks of life, a suitable mixture would be—1P ounces of milk to 1 ounce of water for each pound of body weight per day, with the addition of carbohydrate.

It is generally accepted that a normal child requires 45—50 calories per pound of body weight per day. One ounce of breast milk and one ounce of cow's milk provide approximately 20 calories. One ounce of sugar supplies 120 calories, so one drachm, or a level teaspoonful provides 15 calories. An infant requires $2\frac{1}{2}$ ounces per pound of body weight, of breast milk, in twenty-four hours, which provides 50 calories. The normal infant requires $2\frac{1}{2}$ ounces per pound, of fluid, in twenty-four hours. Therefore a baby who is fed on fresh cow's milk requires the following in respect of each pound of expected weight to make it thrive—

Milk	$1\frac{3}{4}$ ounces	=35 calories
Water	$\frac{3}{4}$ ounce	
Sugar	1 drachm	=15 calories
	—	—
Total	$2\frac{1}{2}$ ounces	50 calories
	fluid	

An infant's "expected" weight is arrived at in this way. For the first four or five days after birth there is a slight loss of weight, but at the end of ten days the infant should have regained its birth-weight. It is then reasonable to expect a gain in weight of an ounce a day for a further hundred days. Afterwards the baby should gain about a pound a month up to a year old. The calculation therefore to ascertain the expected weight should be made on the birth weight, plus one ounce for each day of life, excluding the first ten days.

In using the **full-cream dried milks**—National, Cow and Gate, Ostermilk No. 2, Trufood—one measure dissolved in one ounce of water will reconstitute one ounce of cow's milk having a caloric value of 20. An infant, therefore, fed on dried milk of this type will require daily, for each pound of expected body weight—

Full-cream Dried Milk	1 $\frac{3}{4}$ measures	=35 calories
Water	2 $\frac{1}{2}$ ounces	
Sugar	1 drachm	=15 calories

Total	2 $\frac{1}{2}$ ounces fluid	50 calories
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In using the **Humanised dried milks** it must be remembered that lactose is added to these powders in the correct proportions, and so one measure dissolved in one ounce of water produces very nearly the percentages of the constituents of breast milk; therefore a normal infant requires daily per expected pound of body weight—

Humanised Dried Milk	2 $\frac{1}{2}$ measures	=50 calories
Water	2 $\frac{1}{2}$ ounces	

Total	2 $\frac{1}{2}$ ounces fluid	50 calories
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Unsweetened Condensed Milk is sometimes used for infant feeding. This is a full-cream milk which by evaporation is raised to a strength rather more than twice the original strength. Thus the infant requires daily for each pound of expected body weight—

Unsweetened Condensed Milk	$\frac{3}{4}$ ounce	=35 calories
Water	1 $\frac{3}{4}$ ounces	
Sugar	1 drachm	=15 calories

Total	2 $\frac{1}{2}$ ounces fluid	50 calories
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In speaking of the quantities I have used the word "measure" and "ounce." Errors are likely to creep in if the words "table-spoon" and "teaspoon" are used. The ordinary domestic tablespoon holds from threequarters to one ounce and so a graduated measure should be used, but if this is not available easily, most mothers possess a bottle graduated in ounces. She should be told to mix the power with a little water, pour it into the bottle, and then add water to the required mark. Heaped teaspoons of dried powder are quite inaccurate, and the measure should always be used, the powder being put into the measure with a spoon, and levelled off without compression. The usual practice of dipping the measure into the packet or tin and flattening it off against the side, results in considerable compression and therefore over-feeding.

I apologise for such elementary teaching in my lecture to you, but

it is well to be constantly reminded about the smaller details which are so essential in successful infant feeding.

The two main difficulties in artificial feeding are "underfeeding" and "over-feeding."

Underfeeding often goes unrecognised for a few weeks. The baby will take his feeds eagerly, cry when the feed is finished and cry before the next one is due. There is also a slow gain or even a loss in weight. The very young or feeble baby, however, shows no evidence of hunger, but becomes more and more lethargic. The stools may be infrequent, or they may be excessive in number, and small and greenish-brown. When under-feeding occurs it is necessary to calculate the caloric requirements of the infant for its expected weight, and feed up to these requirements. The feed should be gradually increased, up to the normal by easy stages.

Over-feeding is, in the first place, shown by vomiting, in which the baby gets rid of the food he does not require. There will probably be signs of discomfort, a distended abdomen, and probably he will pass an excessive number of rather loose stools. Here again a calculation of the caloric requirements and adjustment of the feeding, will produce the desired results. In artificially fed infants the common signs of something going wrong are diarrhoea and vomiting.

Diarrhoea may be due to one of three causes— (1) An infection of the bowel by one of the dysenteric group of organisms, arising in several ways. Carelessness in the sterilisation of the bottles and teats, by infection of the milk itself, or infection carried by the attendant. (2) By indiscretion in diet or by wrong feeding. (3) By parenteral infection, that is an infection outside the alimentary tract, for example naso-pharyngitis, otitis media, or pyelitis. Here I would like to stress the importance of seeing that all nurses and others who have the care of young infants should not attend to them when there is a possibility of conveying infection. A nurse with a bad cold may be responsible for a severe, or even fatal, gastro-enteritis, in a young infant. Scrupulous cleanliness of the hands and all feeding utensils should be insisted upon. The practice of wearing a mask at all times when attending to a baby is one which should be encouraged or even insisted on.

Vomiting may arise from various causes: I will only mention a few. (1) Occasionally an infant will vomit soon after birth the cause being an organic stenosis of the oesophagus or duodenum.

(2) The vomiting of pyloric stenosis does not manifest itself for a fortnight or three weeks after birth, and is characterised by projectile vomiting and constipation. The child fails to gain, or loses weight. In the typical case, peristaltic waves can be seen crossing the abdomen from left to right. In my opinion the treatment is operation.

(3) In vomiting from gastric causes, for example dyspepsia, all food should be stopped, and the child given half-strength normal saline by mouth. If the vomiting is severe, it is of great help to commence treatment with gastric lavage, using normal saline. The return to normal feeding should be gradual, using either skimmed milk or half-cream dried milk.

Vitamin Supplements. Unless appropriate measures are taken

many full-time infants, and nearly all small premature infants develop rickets and anaemia due to iron deficiency, and some develop scurvy.

Full-time babies getting out of doors rarely develop rickets in the summer months. Therefore mothers should be told to give all babies a vitamin supplement, to give an iron mixture, or a dried milk which contains iron (Hemolac) from about 2 to 3 months old, and also to give vitamin C. Vitamins A and D should be started at the age of six weeks, cod liver oil being used, commencing with a few drops a day up to the full dose. It is estimated that to prevent rickets the baby should have 700 units of vitamin D per day. The following preparations, which also contain vitamin A, should be given in the following doses which contain 700 units of vitamin D—

Ministry of Food Cod-liver-oil compound	1 teaspoonful
Cod liver oil emulsion	2 teaspoonfuls
Seven Seas Cod liver oil	$\frac{1}{2}$ teaspoonful
Adexolin	6 minims
Radiosteoleum	5 minims
Ostelin	$2\frac{1}{2}$ minims

Vitamin C should be started at the age of four weeks for the prevention of scurvy. It has been estimated that the basal requirements of an infant are from 10 to 30 mgms: of ascorbic acid per day. Orange juice contains approximately 10 mgms. to the teaspoon, so a child should be given from one to three teaspoonfuls a day, diluted with water. Some infants cannot take orange juice as it gives rise to vomiting or slight looseness of the bowels. In such cases it is advisable to give ascorbic acid tablets, which are available in 5, 25, and 50 mgms., or one of the other preparations such as Rose-hip Syrup 1—3 teaspoonfuls, or Black Currant puree 3 to 4 teaspoonfuls.

SCHOOL MEALS

By MRS. HUNTER.

“The balanced school dinner, when properly prepared and presented, is the finest social, cultural, and educational project that the Ministry of Education have introduced into any school. It is a pearl beyond price—will help a long way to make British Children the happiest and healthiest in the world.”

I believe this: therefore I am happy to note Section 49 of the Education Act of 1944, which makes it a duty for Local Education Authorities to provide milk and meals for pupils in attendance at schools and county colleges maintained by them.

It is regrettable that a 100% service is not yet possible. Many complex problems still confront authorities, such as premises, equipment, staffing and supervision. In spite of shortages the growth of this service has been phenomenal. Today school meals are an accepted fact; a normal part of school life.

GROWTH OF THE SERVICE

In 1939—250,000 meals were served daily, chiefly to necessitous children. In October 1941—406,000, nearly double the number.

February, 1946—1,900,000 children in England and Wales and 200,000 in Scotland were receiving good meals; *i.e.* 40% of all children of school age. To-day, in a time of great emergency, in the present nutritional crisis, with limitation of food, many more school children will benefit in health and well-being due to the school dinner than was possible in 1939. To-day the provision is not for the necessitous alone. Government policy is endeavouring to provide *every* school child with a mid-day meal. Until there are premises and supervision for all children it is unfortunate that some children cannot participate in this new social custom, and thus the service cannot be "free." But there is no doubt that those children, who are fortunate enough to be allowed by circumstances—and parents—to partake of a school dinner daily, will, with more certainty, receive the optimal supply of nutrients, which make for healthy growth and diet.

The Science of applied Nutrition. Research workers, teachers, and caterers have worked in close liaison, and have accumulated knowledge of food science during the war years; and through communal feeding centres, canteens and schoolmeals the public are being given a taste for the right kinds of food; and are being shown the part played by a good diet in establishing national stamina upon a thoroughly firm foundation. Through the school meals service strong, robust, happy children should be built up, in the lean years that lie ahead. It should provide a magnificent field for the education of children in all the elementary principles of healthful living, which includes not only knowledge of food values, but new ideas in social customs. As Lord Horder said at the inception of the Service, "School meals must be both physiologically profitable and psychologically attractive."

Public Opinion. Behind the general acceptance of a school meal system, in the public mind, lurks an unresolved conflict of habits and ideals.

(1) Many social theorists maintain that it "helps to *free mothers* from arduous domestic tasks—enables them to take part in communal life, and enables them to enter industry." Where a mother is in full time employment her child can have school dinners—not otherwise in areas where premises and equipment are still limited.

(2) Another extreme view—"Schoolmeals tend to break up the family unit," "weaken the sense of responsibility in parents," and "deprive children of closer relations with parents that are the true basis of morality."

Between 1 and 2 are every phase of opinion; but the service is accepted today and the majority of parents gladly avail themselves of it. The children of today are adapting themselves to a new institution; when they become parents they will take it for granted that their children have the mid-day meal at school.

EASY ACCEPTANCE OF THE SERVICE

(1) The daily routine of many parents and children has been much affected since 1939—evacuation, bombing, women working, father

away, the usual habits and routine upset by war emergencies, rationing of food. Thus a transition in social habits and ways of thought gradually took place, and this affected methods and modes of living—canteen meals in workshop and factory—at school—and in British restaurants.

(2) Prior to the war, about 3% children were supplied with meals, many free. When war became imminent the chief interest was in how school meals could help in feeding evacuated children—no expense was authorised at first, so much improvisation became necessary. Each succeeding war-year made the need for a school meal more realised, it was recognised that the Service must be shorn of the poor-law taint, and that the status of the school canteen must be raised, in order to overcome the prejudice of parents. So improvements were established: many authorities started a central kitchen for a group of schools; meals were improved, and paid for by those who could afford it, but still hampered by all-round shortages.

WHY IS THIS FREE MEALS SERVICE BEING ESTABLISHED?

(1) To provide each child with a wholesome, well-balanced meal, supplying a goodly proportion of the essential nutrients for a healthy growing child. This is the obvious and most elementary task for the school meals organiser—who must exercise ingenuity and imagination to make an attractive dinner.

(2) It helps the child to develop good table manners.

(3) We want to rear a generation of adaptable and rational consumers of food. With all to-day's food difficulties it is only by our adaptability that our diet can be balanced and adequate, according to the accepted nutritional requirements. School is the place where revolution in food habits can take place. Habits are formed in youth.

(4) The school canteen is a medium through which we can prepare children for a social life. This will be more complex in the future. The School Canteen will prepare the child to take his place easily in the works canteen, the barrack mess-room, the trade union, the club. Surely the meal table is an obvious place where sociability, ease of manner, mutual helpfulness, and tolerance can be fostered.

(5) The school meal is also part of a child's education in nutrition and food values. The positive approach to an understanding of good nutrition is ideal. Learning to select a good dinner is not only knowledge which is of value immediately, but for the rest of life, and also it very often involves an indirect education of the parents.

Priority Food allowances for Schools. School meals are allowed foods which will supply the children with their essential requirements of
animal protein for growth—meat and milk
calcium for bone development—milk
to supply energy for activity and growth—fats and sugar.

Drinking of milk and eating of cheese and vegetables is encouraged. A school meal which supplies the above nutrients and uses food allocations judiciously, has a school garden or allotments and makes use of unrationed food, goes far towards supplementing home rations.

PROBLEMS THAT REQUIRE TO BE FACED

(1) **Preparation and Cooking.** Loss of nutrients if vegetables are poorly prepared and cooked and kept hot.

Suggested Remedies: (a) Vegetable kitchen attached to each dining hall; (b) Trained educated vegetable cooks.

(2) **Serving of Food.** Must be *appetising* and *attractive*—(a) therefore central kitchens are not good; there is loss of palatability in transport—cannot do fried food like chips and batter, which have good caloric content. (b) Uniformity not always possible in servings—there is a lack of experienced servers. Second helping problem. Suggested remedy—vegetables on the table.

(c) *Oslo meal*—raw vegetables and salads take too long to eat (half as long again)—meals hurried because of second shift in many canteens—or supervisors wish to get away, so children are hurried.

(d) *Attitude of Supervisors and Servers* not always good. They should encourage the children to try new dishes and set them a good example.

(e) *Attitude of Parents* who often prevent child who has dinner at school getting his full rations at home and so he does not get his daily requirement of nutrients. The school meal is intended to be supplementary to (not instead of) home rations.

The School Feeding Officer or Organiser has a most important part to play; she needs to be a superwoman—an administrator as well as a technical officer; a child psychologist as well as an expert cook and caterer and must understand educational theory, food economics, history of food habits. Her department is part of the organic life of the school—not something alien grafted on to the school, and the function of the Organiser is basically an educational one, since the school meal is part of the process of the child's education.

The service is daily becoming more mature, and, as construction proceeds, the attractive dining halls, and efficient kitchens, will be an accepted feature. Then woe-betide the Organiser who has not had vision—who has confined her attention solely to the catering and technical branches of the work. Now is the time when she must establish her status with her director, committee, teachers, kitchen staff, parents and children. Her relationship to all branches of the education service is all important.

The Teacher's Part. If teachers really join in the school meal, opportunities are provided for social intercourse invaluable to both teacher and pupil. The sharing of food has from time immemorial been recognised as one of the strongest bonds known to races all over the world. The key to the success of the service really lies with the teachers; and since the canteen is concerned as part of the educational system, either a member of the teaching staff, or some specially appointed "Matron" has to be responsible. The solution of the responsibility for supervision of the diners both at meals, and later in the playground is important. It is a voluntary duty—there is no remuneration for this overtime. In some schools the headmaster and the staff join in the meal—in some at a high table, in others amongst the children. The tone of the school meal is determined by the Head; success is in the

hands of every Head and the teaching staff. The new Bill asks teachers to continue the service—to voluntarily accept the duties. My appeal is not to let up on the children until we have established school meals in every school as a going concern. There is no doubt that the children are helped immeasurably if sympathetic teachers are present at the school meal. Grace before, cleanliness at table, inculcation of table etiquette will be invaluable when the children go out into the world. We shall be saved the shocks of seeing children at school camps bolt their food and lick their plates. Afternoon lessons will be easier. Teachers will be less worried by pale emaciated faces, and children too tired to concentrate on lessons in the afternoon, through lack of food.

But there is the other point of view to consider. Is it wise to overburden teachers with extraneous duties in the dinner period? For a teacher to be virile and enthusiastic in the afternoon as in the morning a break is necessary. Fifty children are exhausting, teaching uses up tremendous energy. So some people advocate school canteens entirely separate; they maintain that it is refreshing for both staff and children to get away from school premises and from one another. Such advocates say paid help should relieve the teacher who has enough demands made on health and vitality. But, why not a top table served by an auxiliary staff, then the quality and variety of meals can be judged; this is better than taking a plateful to the staff room as is often the case.

After the Meal. Rest rooms for teachers and for children are all important, and are at present almost non-existent. They both need to relax and to be quiet—so parents and teachers must keep on asking.

Improvements Required. (1) Better cloak-room accommodation with facilities for grooming before coming to the dining table. (2) Dining Hall to be used solely for meal and milk service. (3) Rest rooms. (4) Games supervision by trained person for children in their dinner period—too many, at present, run home. (5) Adequate supplies of drinking water at the dining table, and paper serviettes. (6) A closer link with the school garden and allotment, and vegetables prepared in a special vegetable and salad kitchen. (7) If central kitchens must continue facilities on school premises for frying should be provided—chipped potatoes are very welcome. Today's sodden mashed potatoes contain no vitamin C. (8) Refrigeration facilities at the school, then pudding could include ice cream.

Conclusion. In recent years women are taking a tremendous interest in social affairs. Various women's organisations are all eager to study problems of child welfare, and they can do much to hasten progress. They can do much to facilitate and encourage the further development of school meals and milk. A jolly school dinner breathes harmony and happiness, is health giving and health sustaining. The school without a canteen will be an anachronism in the days to come. After all the child's body can only be built once, and therefore, it must be well-built. Children can go on acquiring techniques and academics all their days, but only up to about eighteen years can their bodies develop.

School work will become all the more valuable and venturesome for both pupils and teachers as activities and amenities broaden.

THE NUTRITIONAL SIGNIFICANCE OF MEALS FOR THE EXPECTANT AND NURSING MOTHER

MRS. HUNTER

From the beginning of the last war a feature of the Ministry of Food's plans has been protection of the "vulnerable" groups in the population, and their slogan was "Mothers and Babies" first.

Vulnerable Groups are Expectant and Nursing Mothers, Infants, Children and Adolescents. Vulnerable means "capable of being wounded; susceptible of, or liable to injury, attack" etc. A baby being young and defenceless is vulnerable; before and after birth the baby is in close association with the mother, and entirely dependent on her before it is born; therefore the "Expectant Mother" is one who must receive protection. Hence she has her special rations and allowances and extras to make her less vulnerable, and so able to maintain her own health, and be able to bring forth a healthy baby to swell the population. Unfortunately all mothers do not appreciate this fact, nor the reasons for their special allowances; in many cases the rest of the family have a share in her priority rations; these mothers must be urged to consume their special allowances themselves, for the sake of the baby they are "producing" or "feeding."

Production is thought of and talked of very much to-day; everyone is being urged to produce more and better goods and commodities. We must remember that Mothers are the most important producers in the country; they are producing a wonderful piece of mechanism. The Ministry of Supply ensured that factories in war-time got priority—the best of all tools and materials. The Ministries of Health and Food together ensure that Mothers who are producing the next generation have priority for certain foods in short supply, they give them special allowances, so that they shall get the best of the foods which the scientists assure us nourish the body most efficiently, and ensure healthy growth.

Growth is the principal phenomenon we associate with childhood; during the time of growth the baby is unstable and has few reserves; it is more vulnerable and therefore needs protection. One way to ensure this is to make provision for adequate supplies of nutrients which make for adequate growth and development both before and after birth; in this lecture we are considering what the baby gets from its Mother before birth, and whilst it is breast-fed. Through her special allowances of milk, eggs, sugar, cheese, bacon, fats, meat and B.U.'s. the Mother is helped to provide adequately for her baby—to make sure provision of the essential nutrients. A baby is not an exact replica of an adult, and its needs are therefore only similar to those of an adult to a limited extent. Both the growing baby and the mature adult need to maintain life in

their cells and allow activities of living substance to proceed; *maintenance* must proceed regularly; *energy* is needed for life to go on, and *regulation of activities* is essential for smooth running; all these are required to produce health. These three requirements can only be provided by nutrients, all of which are to be found in food.

Foods. Three groups. (1) Building Foods for maintenance; (2) Energy foods for energy. (3) Regulatory foods to protect health.

NUTRIENTS

The nutrients which determine whether the food shall fulfil one or more of these functions are of two kinds—

- (1) Organic—Proteins, carbohydrates, fats and vitamins.
- (2) Inorganic—Minerals and Water.

Since each Food has several nutrients in its composition, it depends on the preponderance of this or that type of nutrient, as to classification as a Building, Energy, or Protective food. The baby's special needs associated with growth both before and after birth have been catered for by the Ministry of Food.

1. **Extra Building Nutrients** for making new tissue, materials for making the living substance, protoplasm, which is made up of water and proteins. These are obtained from water and those proteins which are found principally in food from animal sources, such as milk, eggs and meat. Not only must living substance be built up, but there must be hardening of the supporting tissue bone and development of strong teeth. For this lime and phosphorus are needed, and to make rich blood iron is required.

2. **Extra nutrients for energy.** Carbohydrates and fats.

3. **Extra Nutrients for regulation** to ensure proper development of tissues, bone hardening, teeth etc., Vitamins A. C and D. Iodine is required for the proper functioning of the thyroid gland.

The prospective and nursing Mother has to eat food, digest it and pass the nutrients into her blood, and ensure that there are adequate supplies for the maintenance of her own body in perfect health, and for the building up of a healthy baby. If she does not eat the right kinds of food for herself and her baby, then nature endeavours to promote normal developments of the offspring, and nutrients are taken from the mother's own tissues as far as possible, *e.g.* if the diet is lacking in materials for bone formation, the mother's bones suffer, and she develops osteomalacia; and if her diet is extremely deficient the baby's bones suffer also, and it develops rickets. So expectant and nursing Mothers have an obvious need for special rations, extra to those of the adult non-pregnant woman. The nursing Mother has an even more exacting task than she had when she was expecting as, at this time, the baby is not only still growing as it was before it was born, but also should be developing very quickly in every way, physically and mentally, forming bone and muscle, in order later to sit up and walk; its teeth are growing and energy is dissipated through all its movements. Mothers do not always realise the importance of the "nursing" period, and are not always as careful of their diet then as they were during pregnancy.

RATIONS FOR EXPECTANT AND NURSING MOTHERS

1. *Ordinary—from R.B.1*

Meat, sugar, cheese, fats bacon provide 51% Protein; 35% Energy; 16% Calcium; 16% Vit. A.; 14% Iron (14% more if 1 oz. liver eaten); 12% Vit. B.; 17% Vit. D.

Bread and Flour—9 B.U.'s.

Milk

“Points”—there is need for education in the suitable expenditure of these.

Vegetables—especially green leaves—there is need for education in the importance of growing these and in how to prepare and cook them.

2. *Additional from R.B.2*

Meat 7d., provides Protein 7%; Energy 3%, Calcium 22%, Iron 8.3%; A .26%.

Milk 7 pints provides Protein 21%; Energy 13%, Calcium 45%; A 1%, C. 6%.

Bread, 2 B.U.'s provides Protein 5.2%; Energy 5.7%; Calcium .5%; Iron 6.3%; also A. B. C. D. in small amounts.

Dried Egg $\frac{1}{8}$ pkt.+1 extra shell egg at each allocation provides Protein 2.1%; Energy .9%; Calcium 5.6%; Iron 2.8%; A 2%.

Vitamin Supplements—orange juice (C), C.L.O. (A and D), or a packet of tablets A and D.

REASONS FOR THESE EXTRAS

Meat is an important tissue builder, because when it is digested the proteins break down into simpler compounds—amino acids—many of which are essentials if the human tissue of the baby is to be built up properly. Also iron is present and so baby's blood is built up—also meat has a high calory content.

Bread. Extra 2 B.U.'s. National Flour has an extraction of 85%.

It has a high calory value (gives energy). It contains calcium (bone making). It contains Vitamin B (gives energy) also Vitamin E. Protein and roughage.

Egg contains Protein, calcium, iron, Vitamin A.

Milk—the most important food for the expectant and nursing mother; therefore there is a great increase in this allowance. It contains:

1. Proteins in an easily digested form, high nutritional value, essential for building.
2. Calcium content is excellent, this is essential for ossification of bones and teeth.
3. Vitamins—A (variable), dependent on food of cows; B (small amount) D (variable); C (small).
4. Fat in Full Cream milk provides energy.

Vitamins. C is non existent in rationed foods—apart from milk which has a very small amount. A and D are variable. Green leaves

supply A and C, but one cannot be certain that the Mother will eat green leaves regularly, nor that they will be prepared and cooked properly when she does. Fat fish, such as sardines, salmon and herrings supply D, as does vitamised margarine, but there may not be a suitable allocation of points for tinned sardines, herrings or salmon, nor of purchases of fresh fish; there is only a little D in margarine, not enough for a pregnant woman. As it is an established fact that A, C, and D are all absolutely vital to normal growth and development hence vitamin supplements are provided for the expectant and nursing mother.

Orange Juice supplies C. An expectant mother needs roomg. daily. **Cod Liver Oil** supplies A and D. Why is it imperative for the expectant Mother to take advantage of the M.O.F. supplies of vitamins A and D for her baby? A is found in plentiful supply in livers of fish because A is a fat soluble compound manufactured by several animals (including man) if they are supplied with carotene—a yellow pigment found in land and sea plants. Cod and halibut get their carotene from marine algae. Mammals, such as cows and humans, get carotene from green leaves, fruits (tomato) and roots of carrots. More vitamin A is made than is needed for immediate requirements, so the animal stores it, as a fat-soluble compound, in the liver and body fats. The older a fish the richer is the store of A in the liver. A is essential for growth promotion and development; therefore pregnant women—and children—need relatively more A than an ordinary adult. Since A varies in dairy produce according to season and feeding of animals, therefore A content is low in milk, butter, and eggs in the winter—therefore give C.L.O., a reliable source of A, 1 teaspoonful=7 gms.

Vitamin D is also obtained from liver oils and fats of fish. Sunlight—ultra violet rays—is the cheapest source of D, but the Foetus is not able to obtain D this way as neither natural sunlight nor rays from a mercury lamp can reach its skin; the expectant mother makes little—only a small part of her skin is exposed to ultra violet rays, and practically none in the winter, and on a sunny day in summer smoke and dust often interfere with the rays, so the only certain way for the foetus to get regular supplies of D is for the expectant mother to take it from the storehouse (liver) of fish which stores the natural D.

C.L.O. is the best source of supply for both D and A; the Mother passes the nutrients from her digestive tube into her blood and from these into the blood of the foetus. C.L.O. and M.O.F. tablets A and D are perfectly safe to take according to directions, but if Mothers take other concentrated preparations, and, in their enthusiasm take larger doses than the directions say, they may do more harm than good.

Orange Juice. Why is it imperative for the expectant mother to take advantage of the M.O.F. supplies of Orange Juice? It is equally as important as C.L.O. for the juice is the means of certain supplies of Vitamin C (ascorbic acid). Milk is too variable to be relied on as a source of C, and it is extremely doubtful whether the Mother would regularly get the necessary amount of this vitamin, even if she ate green vegetables daily. So unstable is this vitamin that many destroy the nutrient in the preparation and cooking of vegetables. Citrous fruits are rich sources of C but supplies of such fruits are irregular, so the

M. of F. stocked juice of oranges, and those entitled should take advantage of it. Vitamin C is needed for growth to proceed naturally, so that tissue can form, organs be built, and systems be established with tubes such as blood vessels. Lack of C can cause poor development, loss of vitality, and general ill-health, results of which are continued into later life.

So it is imperative that the Expectant Mother should eat and enjoy her share of the rationed foods and extras. She must make certain of the extra protein—building material—so that the foetus will form into that normal baby to which she should give birth. She has also to supply building material for the glands in her breast to develop, also her uterus walls have to stretch and enlarge. Since it is animal proteins which are best adapted for this building function she must eat the eggs, milk and meat to which she is entitled, and, to be a perfect “baby factory,” she must safe-guard her own health, and that of the baby, by getting the essential minerals and vitamins daily.

Later, as a nursing mother, her demands of all nutrients are greater than those of any other type of person, with the exception of a very active man doing heavy manual work, who needs more calories daily than the nursing mother, but requires less of all the other nutrients. Thus a nursing mother has the rationed foods from her own book R.B.1. together with the child’s rations on R.B.2, and these she must eat herself—she needs them—that is why the M.O.F. allows them. She is also allowed 14 pints of milk a week in order that she can feed adequately her growing baby. The mother’s diet during the nursing period (as before hand) must be very well balanced, if the baby’s organs are to develop, and work to capacity, and a healthy child result.

REFORMING PROBLEM MOTHERS

MISS RUTH WHITE

The consideration of “Problem” Mothers opens a wide field. I propose to deal with them from the angle of the child possessing a problem parent, and from the point of view of the Health Visitor and School Nurse going into the home. Let us remember however, that there are countless good friendly, happy parents rearing healthy, happy children, and keep the question of the problem mothers, serious though it is, in its right proportion.

For convenience I have enumerated seven types of problem mother with whom you will all be familiar. Some can easily be seen to belong to more than one category, and the divisions in any case are not clearly defined. In many cases no neglect on the part of the mother in the narrow sense could be indicated. All the same she is a problem; she causes much child suffering and ill-health; and she needs help and understanding and in many cases discipline and reform. You may think she needs punishment.

1. **The Disinterested Mother** at the present day is a great problem. The child has a right to a real interest in all his doings, and it is a great tragedy in the life of so many toddlers, school children and adolescents that the mother, engrossed in her home duties or own affairs, does not let

her child feel her real active interest in *his* affairs, nor does she necessarily feel it incumbent on her to be interested. It is seldom that a mother is disinterested in her baby, but her indifference to him as he grows, can be quite marked. Consider the toddler; his excursions into the street or garden are important, he returns, time and time again, to the "interested" mother to explain what he has seen, what he is doing and what he is going to do. Active participation is not necessary and cannot be given by a busy mother, but an active interest must be taken in every involved and breathless explanation of his doings, and it is all the child expects or desires.

The mother we are considering does not know how her child amuses himself, he is just "out somewhere," that he is out of the way is often all that is important, that he may be in danger out on the highway is not always remembered. Teachers are sometimes concerned with the lack of interest on the part of some parents, in the children's work and school activities. A Sunday School visitor was shocked to find on going to the homes that some parents just did not know that their children even attended, let alone that they were absent. Later there is a lack of knowledge as to what pictures are seen, and as to what is done in the evenings. Does this give the child a rough sort of independence? Rather does it break down loyalty and breed contempt of the family unit. We find that such a mother is not usually antagonistic to our visits nor resentful of our advice, but is often quite indifferent to it, and is usually apathetic about many things which are vital to the health and well being of the child, e.g. ration and vitamin priorities, Diphtheria Immunisation and attendances at necessary clinics etc.

2. **The Dilatory Mother** is up late in the morning, starts the day badly, the infant is not bathed, the older child too late for proper breakfast, goes unkempt and unpunctual to school, and may be scolded for inattention and untidy appearance. What is the effect of this on an empty stomach? He is bewildered, unhappy and uncomfortable, and has divided loyalties. The whole family suffers from lack of care and attention, clothes etc., are unwashed and not repaired, and the home untidy and comfortless. This mother may be antagonistic and noisy, full of excuses suggesting others need strict supervision, but again she sometimes makes a real and suprising effort with the encouragement of her Health Visitor.

3. **The Repressive Mother** is sometimes, but not always "refained" and a bit above her surroundings. She "doesn't neighbour." Her child is apt to be lonely and cut off from natural pursuits and play-mates. He may be thin, nervous and quiet, or very naughty, no initiative is allowed, and most attempts at normal exploration of own self or of surroundings is firmly nipped in the bud. We find on our visits that most independent actions are met with "Don't" and the mother's main conversation appears to be "give over." The child may be quiet and shy but often shews off during the visit.

4. **The Anxious Mother** attends the Infant Welfare Centre regularly, constantly seeks advice, and exaggerates minor details. The child is either intensely nervous and interested or may be bored and indifferent, or quite rampageous. He is not allowed to enjoy rude health,

and may have temper tantrums and feeding difficulties. The mother's attitude to the child borders on disloyalty, as faults are repeated and magnified, as well as details of imaginary complaints. This difficult mother has always tried everything suggested, she expects a lengthy visit but after this there is no feeling of satisfaction on the part of the Health Visitor. This mother cannot believe anyone understands *her* particular child; the husband usually apologetic, says "My wife, she will worry so."

5. **The Possessive Mother** has something of both 3 and 4 in her make up. She puts great emphasis on artificial manners and terms of endearment. She is interested in her child to the exclusion of other things and people. She must be the centre of the child's interest, and later on saps the initiative of the adolescent. Mothers, as a rule, are more possessive of sons than daughters, and their sons make poor husbands. Especially when the child is young, father is apt to get a raw deal and is often excluded from his rightful share of the child's upbringing and development. Some impression can be made here if the Health Visitor recognises the problem early enough and encourages the mother to accept a wiser attitude. The arrival of a second baby may help the mother but the Health Visitor must bear in mind the possible effect of this on the possessed child.

6. **The Ignorant Mother** with a closed mind; the sort of person who says (when advice is given) "thank you, I know it all." Here the child suffers for the parent's many mistakes at first, but, from the Health Visitor's point of view, the mother if wisely approached, comes often to recognise the real help of her service, and good work can be done with the latent establishment of cordial relations. It is important that the Health Visitor should show "staying power" and not be easily discouraged. She will probably have magazine articles quoted to her, and her knowledge made light of, but when once this knowledge is recognised for what it is then the Health Visitor has made a real conquest and the mother has found a friend.

7. **The Neglectful Mother.** We have during the last few years experienced wide-spread horror when we have had our attention drawn to the dreadful records of neglect and unhappiness which children have had to endure. Thousands of parents have been found guilty of neglect and some hundreds have been sent to prison. In many of these cases their own family home life is finished for the children, as they were committed to the care of the Local Authority and either put into Homes or are boarded out with foster parents. We, who are in touch with such mothers, know that this number constitutes only a percentage of those who are in one way or another really neglectful. There are several types of neglect:—

- (a) Actual physical cruelty is seldom found, but when it is, it is of a serious kind; it is more often found in fathers than in mothers.
- (b) Going out and leaving the children alone.
- (c) Underfeeding and underclothing.
- (d) Keeping in a filthy condition in filthy surroundings.

Any combination (b) (c) or (d) may occur, but (d) alone has been the most common during the last five or six years.

TYPES OF NEGLECTFUL MOTHER

- (a) The mother who is unable to look after her children because she is:
 - (1) mentally unable, i.e. "M.D."
 - (2) Physically unable—commonly, grossly anaemic, suffers from varicose veins, or constant backache etc. and is always feeling tired and ill. Her physical condition may be curable—or incurable.
- (b) The mother who is willing and able to look after her children but is grossly ignorant.
- (c) The mother who is able to look after her children, or who is able to be taught to do so, but is totally unwilling.

These types of mothers, and the type of cruelty of which they are guilty must be differentiated, as it is obvious that they need different treatment.

Dr. Alec Martin, Medical Officer of Health for Wigston, Leicestershire says, "For many years great importance has been attached to the need for sending Health Visitors to the homes of newly born babies, and thus ensuring that the mother is given the advice she needs on nursing, infant feeding and hygiene. Similar methods are needed in many families where children are being neglected, but here the task is a more difficult one. Whereas the average young mother is keen to learn, the parents of neglected children are frequently difficult to deal with, unresponsive, and even antagonistic *until their friendship is won.*" This I consider is the key to all our work in the visiting of neglectful mothers of this kind, and whilst many are disappointing, we all, as health Visitors, have experienced the real satisfaction of seeing the results of our continued teaching and encouraging.

The N.S.P.C.C. usually deals with the more serious cases of neglect but only those which are severe are brought to their notice. As a body of women spending much time in the homes, the small beginnings of neglect should be apparent to us and every effort made to get the parents to recognise the trend of their affairs and to recover themselves before any action on the part of the Society is necessary.

Dr. Martin suggests that an examination of the various plans of social reform, the abolition of poverty, the creation of employment, improvement of education, housing and medical services for all, reveals that each is based upon a service to be rendered by the Government, and that there is little attention given to the need for encouraging personal initiative in the individual. With the abolition of poverty, and adequate provision for prevention and treatment of disease, squalor and idleness, and all the evils which they bring in their train, will be thrown into greater prominence. This is true. I venture to suggest that to the really neglectful mother no amount of children's allowance has made any appreciable difference to their clothing or home equipment. The neglectful and all problem mothers need frequent visits from the Health Visitor and as these mothers realise, she is really concerned and wants to be friendly and of help to them, they will often make a real response.

CAUSES WHICH TEND TO MAKE NEGLECTFUL MOTHERS.

- I. **Depression** due to (a) the inaccurate knowledge of world affairs, and the fears which result from the uncertainty of life.

- (b) Delapidated houses, overcrowding and a real absence of the common necessities for civilised living.
2. Laziness due to (a) insufficient food, indifferent health.
(b) inability not only to make physical effort, but also what is described by them so often as a condition where they have "lost heart."
 3. Cheap pleasures during adolescence cause inability to enjoy the simple dignified pleasures of the home, and to understand the right use of leisure.
 4. Neglect of home life in general.
 5. Want of religion.

REMEDIES TRIED

1. After judicial action, cases have been sent to prison. This has not been found to do much good; in some cases prison life is welcomed by mothers: one said, "I made mail bags (in prison) but it was a rest." What is wrong with our modern society that young mothers find a needed rest making mail bags in prison? It is always a pity to break up the family unit if it can be avoided.

2. Better plans are being tried to help mothers to reform. In Surrey there is a Training Centre where mothers from all over the country can be sent with their children. The Elizabeth Fry Training Centre will accommodate mothers who have been found guilty of child neglect and who, voluntarily agreeing to enter the centre as an alternative to a prison sentence, are put on probation with a condition of residence. Each mother will be given a three to six months' course according to need and will take the younger children with her. The mothers will have separate rooms so that they can be taught individual home-making rather than community living. They will have to wash, mend, lay out the weekly wage to the best advantage and to manage their children efficiently.

I am greatly indebted to Dr. Alec Martin for permission to make use of his Haldane Prize Essay on "Child Neglect" and also to the Elizabeth Fry Training Centre Committee for the use of certain information from their publications.

THE TEACHING OF FATHERCRAFT

DR. LESLIE HOUSDEN, O.B.E.

We have long looked upon good "Mothercraft" as a necessary quality in procuring good child welfare within the home.

It has been obvious to those who thought about it, that women who brought children into the world before acquiring the knowledge to rear them through a healthy and happy childhood were placing the home life in jeopardy.

It was generally agreed that the condition of the child depended on the mother. Later it was seen that such a view was incomplete. While the welfare of the infant depended largely on its mother, that of the older child and of the family in general was influenced by both parents.

The peace of the home-life was seen to be wrecked by parental discord and in a growing number of cases the home itself was destroyed by divorce, and so it became customary to speak not of "Mothercraft" but of "Parentcraft."

The welfare of children is now considered to depend on both parents, not alone on the mother.

Towards the end of the last year a competition was held for young people of both sexes who were asked to write an essay on "The Home life I want for my children." The title was so worded to bring out the competitor's own ideas of home-formation. Of the 155 essays received from England and Wales, nine were written by boys between the ages of fourteen and eighteen years.

The standard was poor. There was no doubt what was wanted, the well built labour-saving house, the ample garden, freedom from want, improved education, but hardly any suggestion was woven into these essays that the father of a family had a part to play in providing a happy home for his children. Everything was to be provided by somebody else. The home-life was founded entirely on a material basis. This points to the first need of "Father Craft" teaching, the enlightenment of potential fathers on their part in providing a happy family life. Of the reasons prompting a man to marry, two of the chief are sexual attraction and a wish to have someone to look after and care for him.

Except during courtship and the early days of marriage, when both do all they can for each other, the roles of the woman and the man in the home become increasingly active and passive respectively.

The wife works and the husband approves. That will remain the pattern of most married couples. It is largely reversed outside the home when the man works and the woman approves. The danger to the home arises when these separate roles become too far apart.

The first need, then, in instructing young men in the meaning of the term "Fathercraft", is to give them a wide view of the joys and duties of family life. There is to-day in many homes, a never-ending and often purposeless struggle to keep going without any very definite idea of a goal worth reaching. Life becomes a dreary routine of daily overwork, during which it would not be possible, even if it were thought of, for the parents to say to themselves at night, "we have enjoyed life to-day". It is part of the father's duty to see that his family do enjoy their lives. He and the mother should set out from the start of their life together with a clearly defined aim.

I cannot stress too much that it is in the power of any young man to ensure a life time of happiness by providing himself with a family. Nearly everyone enjoys being part of an association. From groups of small children, through the gang age, up to the clubs and societies and teams of older people, we find most of us enjoying co-operation in some form or other.

It is in the power of any happy family to take up arms against a sea of troubles. They have their own sure refuge from them.

Such thoughts should find their way into the mind of any young man thinking of marriage. They form one of the reasons for studying "Fathercraft". Such a one has to ask himself how happiness through marriage is to be obtained. It is not by any means a purely prosaic matter. Affection, respect, a sense of fun are all necessary but not too much sexuality. Among the many reasons for marriage failures reliance for its success on mutual sexual satisfaction is one of the chief. Such

satisfaction falls naturally among the other qualities of a happy marriage such as affection and respect. When it is the main support of the marriage the marriage fails.

Fathercraft must find a way of placing marital sexual relations in their right perspective as the summation of basic devotion, affection and respect and not as something for which marriage was made.

Sexual relations with someone who has little to contribute to married happiness but physical attraction, soon becomes tiresome and both parties are glad to wander off in search of fresh experiences with someone else.

“Fathercraft” is another word for, “How to be happy though Married”, and falls naturally into two parts. First there are the theoretical considerations, some of which we have already noticed. Next the practical work connected with the actual management of home and family.

The management is a matter of knowledge and co-operation. Without knowledge there can be neither efficiency, nor confidence in the care of house and children, and without co-operation smooth living is impossible.

The knowledge needed by any father falls into three groups.

(a) There is the knowledge of general social matters connected with the community in which he lives.

(b) There are all those matters connected with the house and garden which enable a family to be well housed, and well fed.

(c) There is the knowledge of Child Care, both mental and physical.

I should like to take these three groups separately.

Much effort and money is spent to-day by central and local governments in the provision of aids to comfortable living. The life of a British citizen is tended by official care from the time that it is known to have been conceived until death. The means are well known to you who form in fact part of that official care. Many fathers are quite ignorant of them.

A mother once remarked after a lecture on the social services, “I had no idea that so much was done for us”. And mothers know more about these things than fathers. That is the pity of it, fathers should know, and during their course of fathercraft should find out what services are at their disposal.

Many of the social services are provided for the care of children. It is necessary for “Fathercraft” to convince fathers that their children remain their own responsibility.

I have met parents who took their children to have them inoculated without having any idea what was to be done or why. They were told that their children must be inoculated so inoculated they must be.

It is a dreadful thought that parents are willing to surrender their children to possible maltreatment (for all they know to the contrary) because someone says it must be done. It is due to ignorance, not lack of affection, and this ignorance must be dispelled before marriage.

The social services must be presented as servants of the parents, they are of benefit to the children and of help to the parents, but must remain secondary to the care and supervision of the parents themselves.

It is the same with the schools. Fathers and mothers should know the teachers, and what their children are learning and who are their school companions. They should in fact, take the keenest interest in their

children's school life and help the teachers to make it as valuable as possible.

Having made clear the possibilities for help from the social services, the advantages to the community of aiding as well as of benefitting from the common effort, and the need all the while of remembering that children are dependants of their parents and of nobody else, the teacher of fathercraft can pass on to the father's part in house and garden.

A good home is the place where a father likes to be, but a mother has to be; at least, while her children are young, she spends most of her time in and around the house.

That house in consequence should be made as attractive to her as it can be made.

It is the duty of a father to see that his wife's house is as easy to work as can be arranged, is attractive and is in good working order. A handy man in any house is a god-send.

Visitors to unsatisfactory homes often deplore their condition of dirtiness without realising that it is no longer possible to clean them. The rooms contain so many things, furniture, boxes, clothes, and rubbish that there is no longer any room for cleaning.

The start of this condition is the habit of putting something down just anywhere and leaving it. Next to a ship, which has become a by-word of tidiness—"shipshape"—a hospital probably forms the best training in tidiness. A mother with a hospital training, usually has a tidy house. It is to be hoped that all mothers trained in "Mothercraft" will in future know how to maintain tidy houses, but they must have the co-operation of the fathers.

The garden, especially falls to the father's lot. It is his duty to know what are the best foods for his family, and to see that they are provided with them.

When children have a father who is a keen gardener, they enjoy luxuries which are not procured by money, but by work. Fathercraft should include information on the possibilities of a small garden, actual gardening instruction need not necessarily come into the course. What is wanted in the course is to open out the prospect of married life to its fullest view.

Eating is one of the joys of life. Good health follows the use of interesting food. Fathers should see that such food is available, just as mothers should be skilled in careful and appetizing cooking. Besides fruit salads, and vegetables, there are eggs, chickens, rabbits, bees, pigeons, pigs, goats, and cows all providing food or milk and all easily kept where conditions are suitable.

Fathercraft must show the folly of deploring the inadequacy of a wage, while a perfectly good garden is allowed to go to seed, or whilst the parents spend so many shillings a week on cigarettes.

The total wage should be apportioned among the needs of the house, and family, rent, lighting, fuel, food, clothes, entertainment, household repairs, outings, pocket money, and the rainy day fund.

The third group of knowledge contained in fathercraft relates to the mental and physical care of children, unless a father possesses this knowledge, he cannot encourage and support his wife in caring for their children in ways most beneficial to them.

The care of infants and small children is of great interest to men if the instruction is suitably worded.

One of the first facts to be brought before the student of "Fathercraft" is that nature produces her babies in good working order. That is a truth that needs to be carried like a torch throughout England.

To-day we have forgotten about nature. Instead of the world of medicine lending its art to the support of nature it presumes to replace her. Birth is a natural process through which a healthy normal baby is brought into the world, in possession of a complete set of organs, all in good working order. With each baby is sent its own particular food supply. "Fathercraft" should teach this and lead men to expect it.

So much fuss is made to-day about breast feeding that its successful accomplishment has become something to wonder at, or at least a matter of congratulation. It should be a matter of course. The same remarks apply to the baby's bowel. It has been placed in the baby for a purpose and delivered in good working order. If the baby be treated as a normal healthy animal, it will work well without any outside assistance.

It should show how it is possible for a father to hold a baby confidently without fatal results. How the suction, and later speech, are unrelated to "tongue-tie," how that nature is unlikely to have made the stupid mistake of letting all boy babies be born in need of the immediate operation of circumcision, how that the soft spot on a baby's skull is not really a danger zone, and other such reassuring facts.

The help of vaccination and similar aids in the prevention of disease should be made clear.

The question of food should be considered as a whole. A father will take more interest in growing the best possible carrots and black-currants if he knows how they will help his family. He should know the various types of food and the benefits to any child of a varied and unrestricted diet.

The habit of regular bedtime, with children cuddling down cosily and happily to sleep, is best ensured by both parents working together. If the need for sufficient sleep is understood by a father, some plan can be contrived which allows him to see and play with the children, without upsetting their routine.

Before leaving the physical side of child care I would like to include in the course of "Fathercraft" warnings against trying to produce the superchild. Most children are exceptional in the eyes of their parents. Damage is only done when fathers try to make them appear exceptional in the eyes of others.

Small children have their own sources of amusement. It may be very hateful to them to be obliged to box, or ride, or take part in other painful sports, when their inclination is all towards something milder. The mental side of child care is the same to whoever it may be taught.

Fathers and mothers both need much knowledge in this if the home-life of the children is to be a happy one. The foundation of the happy home is parental harmony and co-operation, the means through which it is obtained is largely a matter of parental example.

One necessity in the home is honesty, with a complete absence of lying, dishonesty and uncharitableness. The father has an important part to play in its production. He must not in the first place lie to his

wife. The bargain should be I'll do all I can to make you happy and you'll do all you can to make me happy. There is little hope for a family in which the mother has to fight for her share of the father's income. It should be all hers as it is all his, the family treasury from which springs all material joys and comforts of the home. If this spirit of sharing is absent, mistrust arises, and after mistrust, lying. The atmosphere of honesty cannot be maintained under such conditions.

This question of honesty and truth is a matter of great importance in the country to-day. Children are being reared on lies. It is necessary for "fathercraft" to point out the serious effects of such lying.

Too often what is said to a child is not thought to matter. Any words will do, true or untrue. Nothing could be more false. A child so used grows without sense of verbal responsibility. He has been told that there is no more chocolate, when he has just seen it. Why then not say he has not been in the pond even though he has? Why not say someone else took the apples? Why not obtain something by telling lies?

It is a mode of conduct to be faced. Either as a nation we approve of it or we should try to stop it and there is no way of doing this except through the parents. It is a matter for the fathers. If they wish their children to be honest, they must set an example.

If the benefit of honesty to the community, and to themselves is made clear they are more likely to do so.

I think there are two ways of approaching this question in fathercraft courses. Honesty is sometimes difficult to define but harming others is quite easy.

If potential fathers are taught to refrain from activities likely to injure others, including of course abstracting their goods, they will pass on such instructions to their children. That is the first line of approach.

The second is to eliminate jealousy of others. For many families to-day what matters is not that they have enough but that others have more. This more is often come by dishonestly, and to equal it, a family must in its turn be dishonest. It is difficult not to want what others have, but the fathercraft which is good will make the most of what there is already and scorn dishonest methods of increasing it.

Fathercraft must teach that new born infants are fearless and that fear is induced by environment. If one child grows nervous and the other fearless, it is largely because the suggestion by which they are surrounded has been different. If parents from the start would drive all thoughts of fear and nervousness, and of bravery from their heads, and would take it for granted that a child was naturally fearless, fearless that child would be.

The point to remember there is, that this state of mind must be genuine. Self pretence that one takes it for granted that the child is naturally fearless will not do. The parents must be quite confident about it. Adult self confidence in relations with children is all important. It is what I am now suggesting should be inculcated in fathercraft classes.

It is the father's fear—call it perhaps anxiety—of what may happen that suggests fear to the child.

Lectures on "Fathercraft" need never be dull, while there are such matters to expound and discuss. Confident suggestion is a prime teacher of virtues.

THE ART OF TELLING.

MRS. SHAW.

(2 Lectures)

The main part of a Health Visitor's work is telling families about, and educating them in, the practice of healthy living.

Whether it involves talking to individuals in the home, or telling new knowledge to a group or class, it is advisable and helpful to know something of the techniffue of this Art.

In any branch of Education one should hold before one the Moral Aim—which is the Primary aim—the development of Truth and Courage and the formation of well organised and strong character.

The secondary aim of education is the imparting of knowledge in a suitable manner so that in doing so the Primary Aim may be automatically carried out

The Conception of modern education is very different to the old methods of Teaching.

In the olden days knowledge was handed down by word of mouth aided by signs and rough pictures. These were the first visual aids. Then came printing, insuring greater accuracy in the passing on of knowledge.

For a long dull era the Teacher held the centre of the stage and the learners' standard was judged by their mental capacity for learning.

Modern education is changing this, and now it is the Learner who holds the stage, and his is encouraged to apply practical as well as mental activity to his subject—the Teacher and the Learner should be partners in the give and take of the process of Learning.

In all 'Telling' there should be a *stage of preparation* when the first consideration should be 'The Learner' and the 2nd consideration the Subject Matter.

1. The Learner.

Whether the learner be a single individual or contained in a group, he should be known to the Teller from every possible angle—age—tastes, home environment and whether any previous knowledge of the subject is known, then the Teller can choose a Title for her Talk or Talks; this acts as a guide in the choice of subject matter and helps in deciding the manner and level of presenting it to suit the capacity and needs of the Learner.

2. Subject Matter.

This should be gathered from as wide a field as possible, and kept in a special book. Information should be carefully tabulated on separate pages—preferably on the right hand page—leaving the left hand page blank for addition from time to time of relevant information. It is helpful to note sources of information quoting chapter and page for further reference.

From this information further notes or the actual Talk should be made and arranged in a manner which is Simple, Clear, and Concise.

In order that the Subject Matter be of active use to the Learner it should be presented in a certain Technique. Educational Psychology

teaches this technique and shows what happens in the mind when Learning takes place. There is no time or necessity in this lecture to go into this psychology—but we will consider a few facts in relation to Learning, the relation to the correct method of presenting facts so that Learning may be complete.

THERE ARE THREE MAIN LAWS OF LEARNING .

Readiness. Exercise. Effect.

In order that these laws should function to their full extent the learner must receive a *Stimulus* and give out a *Response*.

There is an active element which keeps the Response alive and links the Teacher and the Learner. This element is *Interest*.

Interest is the vital and most essential factor in all complete Learning. A Teller should:

1. Arouse the Interest of the Learner—*Readiness*.
2. Keep that Interest alive through active *Exercise*.
3. Make the Interest have a lasting *Effect*.

All talks therefore should have 3 stages.

1st Stage. Introduction or making ready.

How can one arouse Interest and stimulate Response?

Mainly through the instincts. We are all essentially selfish—the ego or self interest over-rides all others. The ego or self-interest directs our urge to action. The creative instinct—and also the instinct of curiosity with its attendant emotion, wonder, are useful allies to the Teller. Therefore appeal to personal interest of the learner, arouse curiosity and set her wondering.

Tell of something new but relate this to idèas already known. Be adventurous and novel if possible. Make talks sound and look attractive.

2nd Stage. How to keep Interest and Response.

Make active use of these by inviting the co-operation of the Learner. Try and be simple, methodical and clear. Give a brisk impression but be careful not to give essential points too quickly.

Avoid monotony by creating change and variation in the presentation of knowledge.

Give relief by telling personal anecdotes and putting in touches of humour.

Try and create the right atmosphere which is pleasing and devoid of distractions which interfere with the attention of the Learner.

Be too short rather than too long.

3rd Stage. How to make Interest Active and Effective.

Try and make the value of the Talk worth while to the Learner, making the main points stand out clearly. Give every opportunity for co-operation and practical activity on the part of the learner—not only during the Talk—but also between a series of Talks. Be always conscious of the reactions of the individual or class. A good Teacher will feel when it is necessary to stop—give a change of method or extra activity so that the class does not tire or become bored.

Close the talk happily and gracefully, leaving in the minds of the Learner a pleasant memory of the main points.

Why is it necessary to apply a technique in "Telling"? The mind has the power of retaining every experience it has ever received, and more wonderful still it has the power of selecting and recalling any one experience that is required.

Therefore we never really 'forget'—we fail to 'recall'—either because of a real weakness, or more likely because our experiences have made a weak and feeble impression. We should be able to recall experiences quickly, surely, and with conviction.

The Teller therefore should be very careful to give clear, correct and strong first impressions of essential points. The more often these are repeated, preferably from different angles, the stronger the impressions and the more quickly and surely they will be recalled.

The receiving and retaining of orderly impressions form the foundation of an orderly and well organised character.

There are different kinds of memories—some are visual—some are oral—the most usual is a combination of both. We learn through all our senses.

It is therefore advisable and helpful to make use of visual aids in all Methods of Telling, in order that mental images may be clear and correct.

Visual aids include demonstration and specimen material—collected by both Teacher and pupil, books, papers, pictures, charts and posters. Films are always attractive; also visits to see actual situations described.

All such material must be clear, up-to-date and devoid of unnecessary detail.

When demonstrating be sure everyone can see what is being shown, make the talk a mixture of telling, showing and doing.

Be simple and be sure the Learner understands the new words presented to him.

Words should be pronounced clearly and any technical terms written clearly on the blackboard.

The Teacher or Teller should be sympathetic and should appear confident even if she does not feel confident herself. It is helpful to nerves to learn how to produce the voice, and also to practice out loud before a long mirror, because the spoken word sounds different to the written thought of one's notes:

Never be ashamed of using notes—they are nothing to be ashamed of and are a safeguard against a mental-black out which may come upon the most experienced Lecturer.

Teach positively—remember first impressions are always the strongest.

Be punctual in starting and in finishing.

We have seen that it is both helpful and necessary to know something of the Art of Telling—but theory alone is not effective without practice, it is Experience which teaches you to be a good and efficient Teller. So use every opportunity and after each be self-critical, encourage good habits—be very drastic in curing those which are bad and irritating.

As Health Visitors, take the unusual opportunities that come your way of educating citizens to lead healthy useful lives, the knowledge of which they will be proud to hand on to their children in order that they may, we hope, build a more stable and prosperous new world.

HEALTH—THE MASTER KEY.

DR. N. GEBBIE

It was Disraeli who said, "The Health of the people is really the foundation upon which their happiness and all their powers as a state depend". Every one of us, like Lord Horder in his book "Health and a day", can echo the words of Emerson: "Give me health and a day and I will make the pomp of Emperors ridiculous".

During this refresher course, which you have enjoyed so much, emphasis has rightly been placed upon health in its positive aspects—health as the Master Key to the doors leading to a full and free life, to happiness and contentment, and to such a degree of personal hygiene as will enable everyone to be in harmony with his ever-changing environment.

The science which treats of the preservation of health and which forms the basis of our life's work is *Hygiene* which has been defined as "the art of preserving health so as to render growth more perfect, decay less rapid, life more vigorous, and death more remote".

The elementary principles of hygiene are essentially very simple—so simple in fact that we have difficulty in keeping them in mind all the time. We have difficulty in acting upon them ourselves and in teaching others to practise them.

Good plain nourishing food, cleanliness, fresh air, rest and exercise, provide us with a hygienic code which must form the basis of all our propaganda and instruction in positive health. Knowledge and education in health—individual and communal, personal and environmental—are essential if we are to have healthy individuals, healthy communities, and healthy nations.

In securing and maintaining good health standards there are no universal hard-and-fast rules. Certain DO's and DONT'S are obvious, and common sense and moderation will indicate the golden mean—I had almost said health's golden master key.

In our work we are encouraged by the knowledge that health habits, once learned and practised, become automatic.

The close association between physical and mental health must be borne in mind, as must also the relationship between physical and mental illness.

Sir George Newman, previously Chief Medical Officer of the Ministry of Health, wrote in 1926, "Wisdom in mental and moral training is just as necessary as foresight and watchfulness in the hygiene of the physical side of life".

The word "health" as you know derives from the Old English word meaning "wholeness" and in the Oxford Dictionary health is defined as "soundness of body; that condition in which its functions are duly discharged", adding as a later meaning "spiritual, moral or mental soundness".

I need not remind you of the influence of the mind on the physical state:—

"All seems infected that th' infected spy
As all looks yellow to the jaundiced eye."

(Pope—Essay on Criticism)

In the Chronicle of the World Health Organisation, health is defined as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity".

"Mental Health is a science that is still too much neglected: this is shown in the unsatisfactory conditions in which man has to develop—conditions which could be improved: haphazard urbanisation, unsatisfactory working conditions, the noise of great cities, overwork, the fact that recreation is still considered a luxury and not an essential need—these are just a few of the many causes of the psychic instability of modern man."

In his Chadwick Lecture on "Health Education, its problems and methods," Dr. Walter P. Kennedy of the Ministry of Health, said, "Health and Disease are not a simple pair of contrasting opposites like heat and cold. They are made up of immense numbers of components involving the body, the mind and the spirit," and again: "In planning health education, it is not sufficient to instruct people how to improve their personal or community health. It is necessary at the same time to convince them that it is really worth paying the price in effort, time, and perhaps money to obtain these benefits."

Good health remains the master key for all the doors which lead to the orderly growth and development of children and the young, to efficient maturity in the adult, and to placid and healthy longevity in the old. Its importance is seen in all the seven Public Health Ages of man.

(1) Infancy and early childhood.

The state of the mother's health will determine the baby's start in life. Dr. Louise McIlroy at a congress on Maternity and Child Welfare remarked that, "The first twenty-four hours of life were the most dangerous" and Punch in its next issue was quick to ask "What about the last twenty-four hours?"

During infancy and early childhood we are dealing with a self-centred individual—interested in himself and in his body—concerned with the basic functions of eating, sleeping, and excreting; and later with mastering the arts of talking, balancing, walking and playing.

(2) Childhood.

In the period from seven to twelve years, the child's interests gradually swing to his environment. He becomes cognisant of the presence of other people, of animals, and of objects in his vicinity. He is highly imitative and environmental conditions can influence him for good or evil.

(3) Puberty.

During puberty with the advent of the secondary sex characteristics, interest returns to himself or herself. At this period of development, a period of marked stress and strain upon the bodily mechanisms, there is need for special care and watchfulness from a health point of view.

(4) Adolescence.

During this time the personality becomes adjusted to the ripened sex functions and the adolescent boy or girl seeks knowledge of personal health—of what will "enhance health, strength, beauty, grace, and personal attractiveness".

(5) Young Adult.

This is perhaps the period when the benefits of sound health in the earlier stages are most apparent. During this phase economic pressures begin to make themselves felt and responsibilities, personal and communal, have to be shouldered.

Interests arise towards "courtship, marriage, sexual adjustment, vocation, family, care of children, industrial and social health," e.g., housing, nutrition, epidemic disease, become of importance.

(6) Middle Age.

In this period of full maturity we see the results of the practice of sound hygienic standards at the earlier stages of development. It is also at this time that the vital processes begin to wane. This is the age-period when regular medical overhauls are of great importance. Under the National Health Service Act it will be possible in due course, when adequate staff and premises become available, to extend the present facilities for routine medical inspection, which have been so successful in the case of infants and school children, to persons of all ages and particularly to middle age, the time when the degenerative diseases make their appearance and cause anxiety.

(7) Old Age.

The old need have no fear if the doors of the previous stages of growth and development have been unlocked by Health—the Master Key.

Each age period of human life thus has its own peculiar problems and our attitude towards our responsibilities as health teachers must take note of the fact. Our approach to the education of the people in health must be positive and inspired.

Let us ignore Shakespeare's Merchant of Venice:

"Shall I bend low, and in a bondman's key
With bated breath and whispering humbleness."

Rather let us remember Milton's Comus:

"That golden key that opes the palace of eternity."

I have already referred to the elementary rules of hygiene and to their importance in social medicine. Surely they are not the least important of the "basic needs of the citizen" which are, according to Lord Horder:

- (i) Sufficient of the proper food.
- (ii) Suitable shelter and clothing.
- (iii) A satisfactory job of work.
- (iv) Access to the fresh air and sun.
- (v) Reasonable leisure and the amenities of life.

With good standards of individual and communal health these basic needs are assured for all our citizens.

The state continues to show an ever-increasing appreciation of the importance of health.

"Under the National Insurance Act, the state has provided comprehensive protection against many of the economic hazards of life—

sickness, unemployment, and the infirmity of age. It has taken an important step towards removing the reproach that children are the principal cause of poverty."

"By providing security, National Insurance indirectly befriends health. It provides conditions favourable for healthy living even in adversity."

Similarly the National Health Service Act will render timely help by making possible the "establishment of real Health Centres offering scope for promoting the health of families through educational and social activities."

Whilst on the subject of the National Health Service Act, 1946, I would remind you of the widening therein envisaged of the functions of the woman health officer. Let me take by way of example the reference to the duties of the Health Visitor outlined in Section 24 of the Act which is concerned with Health Visiting: "to give advice as to the care of young children, persons suffering from illness and expectant or nursing mothers and as to the measures necessary to prevent the spread of infection". I would direct your attention particularly to the words of the section, "persons suffering from illness." There is likely to be plenty of work of wide variety for the woman health officer of the future and particularly for those who are trained nurses. The principal sections of the Act which deal with nurses and nursing apart from hospital staffs are to be found in Part III of the Act—"Health Services provided by Local Health Authorities".

In *Section 21* concerning Health Centres there is the question of the provision of the necessary nursing and other staffs.

In *Section 22* concerning the care of mothers and young children arrangements have to be made for the care, including in particular dental care, of expectant and nursing mothers and of children under five years of age and not attending the Local Education Authority's Primary schools.

In *Section 23* concerning midwifery it is laid down that certified midwives employed in the area of the authority, i.e., the local health authority, must be adequate for the needs of the area.

Section 24 concerning Health Visiting has already been referred to.

In *Section 25* concerning Home Nursing, arrangements have to be made to secure the attendance of nurses on persons who require nursing in their own homes.

Nurses employed in these various categories will have unrivalled opportunities for service to their fellow citizens in a wide variety of ways. In the bunch of keys she carries, every woman health officer will find in Health and Health Propaganda her Master Key.

The declaration contained in the preamble to the constitution of the World Health Organization—the modern version of the Health Section of the League of Nations—emphasises the key position of health in the following terms:—

"The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being."

On 14th November, 1888, at the inauguration of the Pasteur Institute, Paris, Louis Pasteur said:

“Two contrary laws seem to be wrestling with each other nowadays; the one a law of blood and of death, ever imagining new means of destruction and forcing nations to be constantly ready for their battlefield—the other, a law of peace, work and health, ever evolving new means of delivering man from the scourges which beset him. The one seeks violent conquests, the other the relief of humanity. The latter places one human life above any victory; whilst the former would sacrifice hundreds and thousands of lives to the ambition of one.—

Which of those two laws will ultimately prevail, God alone knows. But we may assert that French science will have tried, by obeying the law of humanity, to extend the frontiers of Life.”

Our work in the field of Health Education and Social Medicine must ensure that health, the fundamental right of every human being, shall reach such a standard that we can say with Tennyson:

“And lives to clutch the golden keys
To mould a mighty state’s decrees,
And shape the whisper of the throne.”

REFERENCES.

- (1) “Health and a Day”—Addresses by Lord Horder—London—J. M. Dent & Sons Ltd.
- (2) “Health Education, its problems and methods”—Chadwick Lecture by Walter P. Kennedy, Medical Officer, Ministry of Health—The Lancet 21.9.46.
- (3) “Method in Health Education”—by Arthur Pinsent, M.B.E., M.A., B.Sc.,—the Health Education Journal—January, 1947.
- (4) “Chronicle of the World Health Organisation”—Vol. 1, No. 1—2, 1947.
- (5) “Pillars of Health” from a correspondent—The Lancet—12.4.1947 (p. 496).
- (6) “The Life of Pasteur”—by Rene Vallery-Radot (p. 444).

